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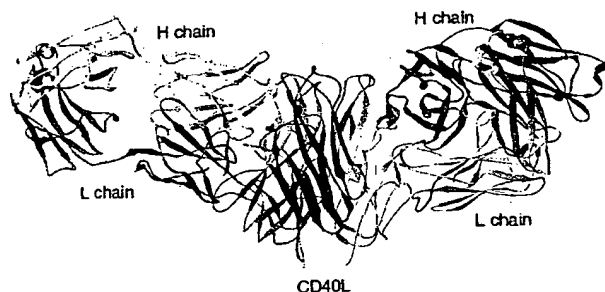
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(54) Title: CO-CRYSTAL STRUCTURE OF MONOCLONAL ANTIBODY 5C8 AND CD154, AND USE THEREOF IN DRUG DESIGN



(57) Abstract: The present invention relates to compositions and crystals of CD154 (CD40L) in complex with an anti-CD154 antibody. In addition, this invention relates to the high resolution structure of a CD154/anti-CD154 antibody complex as obtained by X-ray crystallography. Specifically, this structure provides binding sites defined by the structure coordinates determined herein. This invention also relates to a computer (machine) comprising a machine-readable data storage medium comprising a data storage material encoded with machine-readable data comprising the structure coordinates provided by this invention. The computer has instructions to process said machine-readable data into a three-dimensional representation of a molecular complex of CD154/anti-CD154 antibody based on the structure coordinates provided by this invention. This invention also relates to methods using the structure coordinates of an CD154/anti-CD154 antibody complex to solve the structure of similar or homologous molecular complexes, as well as methods using the structure coordinates of an CD154/anti-CD154 antibody complex to design chemical entities or compounds, including agonists or antagonists of CD154, that specifically bind CD154 and function as CD40:CD154 binding interruptors, as well as to design variants of monoclonal antibody 5c8, or humanized monoclonal antibody 5c8, or antigen binding fragments thereof, having improved properties (such as increased or decreased binding affinity for CD154). This invention also relates to compositions comprising said chemical entities, compounds or variants of monoclonal antibody 5c8 or humanized monoclonal antibody 5c8. The invention further relates to uses of said chemical entities, compounds or variants of monoclonal antibody 5c8 or humanized monoclonal antibody 5c8 to treat a subject having one or more conditions associated with inappropriate or abnormal CD154 induced activation.

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**CO-CRYSTAL STRUCTURE OF MONOCLONAL ANTIBODY 5C8 AND  
CD154, AND USE THEREOF IN DRUG DESIGN**

TECHNICAL FIELD OF THE INVENTION

The present invention relates to the field of  
5 crystallography and computer-assisted analysis of  
proteins and polypeptides. The present invention  
further relates to the field of computational drug  
design.

BACKGROUND OF THE INVENTION

10 Data establishing that T cell activation  
requires both T cell receptor ("TCR") mediated signals  
and simultaneously delivered costimulatory signals have  
accumulated over the past twenty years. For example,  
antibody production by B lymphocytes in response to  
15 protein antigens requires a specific, costimulatory  
interaction with T lymphocytes. This B cell/T cell  
interaction is mediated through several receptor-ligand  
binding events in addition to engagement of the TCR.  
See, e.g., Noelle et al. Immunology Today 13: 431-433  
20 (1992). See also Hollenbaugh et al. EMBO J. 11: 4313-  
4321 (1992). These additional binding events include  
the binding of CD40 on B cells to CD154 (CD40L, and  
also known as gp39, T-BAM, 5c8 antigen, CD40CR and  
TRAP) on T cells. Human CD40 is a 50 kilodalton cell  
25 surface protein expressed on mature B cells, as well as

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macrophages, dendritic cells, fibroblasts and activated endothelial cells. CD40 belongs to a class of receptors involved in cell signaling and in programmed cell death, including Fas/CD95 and the tumor necrosis factor (TNF) alpha receptor. Human CD154, a 32 kilodalton type II membrane glycoprotein having homology to TNF alpha, is a member of the TNF family of receptors and is transiently expressed primarily on activated T cells. CD40:CD154 binding has been shown to be required for T cell-dependent antibody responses. In particular, CD40:CD154 binding provides anti-apoptotic and/or lymphokine stimulatory signals. See, e.g., Karpusas et al. Structure 3, 1031-1039 (1995) and Karpusas et al. Structure 3, 1446 (1995), United States patent application 09/180,209 and PCT patent application WO 97/00895, the disclosures of which are hereby incorporated by reference.

The importance of CD40:CD154 binding in promoting T cell dependent biological responses is underscored by the development of X-linked hyper-IgM syndrome (X-HIGM) in humans lacking functional CD154. These individuals have normal or high IgM levels, but fail to produce IgG, IgA or IgE antibodies. Affected individuals suffer from recurrent, sometimes severe, bacterial infection (most commonly Streptococcus pneumoniae, Pneumocystis carinii and Hemophilus influenzae) and certain unusual parasitic infections, as well as an increased incidence of lymphomas and abdominal cancers. These clinical manifestations of disease can be managed through intravenous immunoglobulin replacement therapy.

The effects of X-HIGM are simulated in animals rendered nullizygous for the gene encoding



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CD154 (knockout animals). Studies with nullizygotes have confirmed that, while B cells can produce IgM in the absence of CD40:CD154 binding, they are unable to undergo isotype switching, or to survive normally and  
5 undergo affinity maturation. In the absence of a functional CD40:CD154 interaction, spleen and lymph node germinal centers do not develop properly, and the development of memory B cells is impaired. These defects contribute to a severe reduction in or absence  
10 of a secondary (mature) antibody response.

Individuals with X-HIGM and CD154 nullizygotes also have defects in cellular immunity. These defects are manifested by an increased incidence of Pneumocystis carinii, Histoplasma capsulatum,  
15 Cryptococcus neoformans infection, as well as chronic Giardia lamblia infection. Murine nullizygotes are deficient in their ability to fight Leishmania infection. Many of these cell-mediated defects are reversible by administration of IL-12 or IFN-gamma.  
20 These data substantiate the view that CD40:CD154 binding promotes the development of Type I T-helper cell responses. Further support is derived from the observation that macrophage activation is defective in CD154-deficient settings, and that administration of  
25 anti-CD154 antibodies to mice diminished their ability to clear Pneumocystis infection. Blockade of CD40:CD154 binding appears to reduce the ability of macrophages to produce nitric oxide, which mediates many of the macrophages' pro-inflammatory activities.  
30 It should be noted, however, that mammals (including humans) who lack functional CD154 do not develop significant incidences of viral infection.

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A number of preclinical studies, including those described in co-pending, commonly assigned PCT patent applications published as W098/30241, W098/30240, W098/52606, W098/58669 and W099/45958, describe the promise of agents capable of interrupting CD40:CD154 binding as immunomodulating agents. In murine systems, antibodies to CD154 block primary and secondary immune responses to exogenous antigens, both in vitro and in vivo. Antibodies to CD154 cause a reduction in germinal centers in mice and monkeys, consistent with data on CD154 immunodeficiency. Administration of three doses of anti-CD154 antibody to lupus-prone mice, age three months, substantially reduced titers against double-stranded DNA and nucleosomes, delayed the development of severe nephritis, and reduced mortality. Moreover, administration of anti-CD154 antibodies to mice age five to seven months with severe nephritis was shown to stabilize or even reverse renal disease. Anti-CD154 antibodies given concomitantly with small resting allogeneic lymphocytes permitted unlimited survival of mouse pancreatic islet allografts. In other animal models, interference with CD40:CD154 binding has been demonstrated to reduce symptoms of autoimmune disease (e.g., multiple sclerosis, rheumatoid arthritis, inflammatory bowel disease), graft rejection (e.g., cardiac allograft, graft-versus-host disease), and mercuric chloride induced glomerulonephritis, which is mediated by both humoral and cellular mechanisms.

Such studies with anti-CD154 antibodies demonstrate the role of CD154 as a critical target for modulating immune responses.

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Currently, the most effective of the available CD40:CD154 binding interruptors are anti-CD154 antibodies. Antibodies, however, may not, in all cases, be the most effective CD40:CD154 binding interruptors for use as a human therapeutic agent. Further development of novel agents that are more effective in interrupting CD40:CD154 interactions and serve as improved human therapeutic agents is hampered by the lack of structural information of CD154 and an agent known to bind specifically to CD154. That information is provided for the first time by the present invention.

#### SUMMARY OF THE INVENTION

Applicants have solved the above-identified problem by providing compositions, which can be crystallizable, and crystals of CD154(CD40L) in complex with an antibody that specifically binds CD154 (an anti-CD154 antibody) and methods for using such compositions and crystals.

This invention also provides the structure coordinates of CD154 in complex with an antibody that specifically binds CD154.

This invention also provides methods for determining at least a portion of the three-dimensional structures of molecular complexes which contain at least some structurally similar features to a CD154/anti-CD154 antibody complex.

This invention also provides methods for designing chemical entities, compounds, such as agonists and antagonists of CD154, and variants of the 5c8 monoclonal antibody, or an antigen binding fragment thereof, that specifically bind CD154 and, accordingly,

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act as CD40:CD154 binding interruptors. This invention further relates to compositions comprising the chemical entities, the compounds, such as agonists and antagonists of CD154, and the variants of the 5c8  
5 monoclonal antibody, or antigen binding fragments thereof, that specifically bind CD154 and that are rationally designed by means of the structure coordinates of a CD154/anti-CD154 antibody complex. The invention further relates to use of the above-  
10 identified chemical entities, compounds, such as agonists and antagonists of CD154, and variants of the 5c8 monoclonal antibody, or antigen binding fragments thereof, to treat conditions associated with inappropriate or abnormal CD154 activation in a  
15 subject.

This invention also provides a computer, which comprises a storage medium comprising a data storage material, for producing three-dimensional representations of molecular complexes comprising  
20 binding sites defined by structure coordinates of CD154 and an anti-CD154 antibody and methods for using these three-dimensional representations to design: 1) chemical entities and compounds that associate with CD154 or anti-CD154 antibody, 2) compounds, such as  
25 potential agonists or antagonists of CD154; specifically, or 3) variants of anti-CD154 antibodies (such as variants of 5c8 mAb) with improved properties, such as those that bind with higher or lower affinity to CD154 as compared to the non-variant, parent anti-  
30 CD154 antibody (such as 5c8 mAb), by using computational means to perform a fitting operation between chemical entities, compounds, such as agonists and antagonists of CD154, and variants of the 5c8

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monoclonal antibody, or an antigen binding fragment thereof, and a binding site. This invention also provides the chemical entities, the compounds, such as agonists and antagonists of CD154, and the variants of  
5 the 5c8 monoclonal antibody, or an antigen binding fragment thereof and compositions comprising them.

The foregoing and other objects, features and advantages of the present invention, as well as the invention itself, will be more fully understood from  
10 the following description of preferred embodiments.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color  
15 drawing(s) will be provided by the Patent Office upon request and payment of the necessary fee.

**Figure 1** depicts a ribbon diagram of a complex comprising a trimer of the extracellular domain of human CD154 and three Fab fragments of humanized  
20 monoclonal antibody 5c8 ("hu5c8 mAb"). Each Fab fragment of humanized 5c8 mAb binds to a monomer of CD154. This figure provides a view along the 3-fold axis. The three CD154 monomers, located in the center of the Figure, are colored yellow, green and dark blue.  
25 The three Fab heavy chains ("H chains"), located in the foreground relative to the Fab light chain, are colored grey, dark grey and magenta and the three Fab light chains ("L chains"), located in the background relative to the Fab heavy chain, are colored dark blue, orange  
30 and turquoise.

**Figure 2** depicts a ribbon diagram of a complex comprising a trimer of the extracellular domain of

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human CD154 and three Fab fragments of humanized 5c8 mAb. Each Fab fragment of humanized 5c8 mAb binds to a monomer of CD154. This figure provides a view that is perpendicular to the 3-fold axis. The 3-fold axis runs  
5 from top to bottom of the diagram. The three CD154 monomers, located in the center of the Figure, are colored yellow, green and dark blue. The three Fab heavy chains are colored grey, dark grey and magenta; and the three Fab light chains are colored dark blue,  
10 orange and turquoise. Only two of the three Fab fragments of hu5c8 mAb are displayed; the third Fab fragment has been omitted for clarity.

**Figure 3** depicts a stereo view of a representative portion of the final 2Fo-Fc electron density map. The  
15 map is contoured at  $1.2\sigma$  and superimposed on corresponding atoms from the final refined model.

**Figure 4** lists the atomic structure coordinates for the extracellular domain of human CD154 in complex with the Fab fragment of humanized 5c8 mAb, as derived by X-ray  
20 diffraction from crystals of that complex in protein data bank (PDB) format.

**Figure 5** shows a diagram of a system used to carry out the instructions encoded by the storage media of  
Figures 6 and 7.

25 **Figure 6** shows a cross-section of a magnetic storage medium.

**Figure 7** shows a cross section of an optically-readable data storage medium.

**Figure 8** shows the amino acid sequence of human CD154  
30 (the fragment in brackets was crystallized) and shows the amino acid sequence of humanized 5c8 mAb heavy and light chains (the fragments in brackets were visible in the crystal structure; whereas the actual molecule

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crystallized could be a few residues longer (heavy chain) or was presumably the whole sequence (light chain)). Residues of the CDR loops of the hu5c8 mAb heavy and light chains are underscored.

- 5 **Figure 9** lists the atomic structure coordinates for the uncomplexed Fab fragment of humanized 5c8 mAb, as derived by X-ray diffraction from crystals of that Fab fragment in protein data bank (PDB) format.

**Figure 10** shows a view of the CD154-5c8 mAb interface.

- 10 The CD154 backbone is represented as a yellow ribbon and the H and L chains of 5c8 mAb are represented as blue and red ribbons. Side chains of residues involved in CD154-5c8 mAb contacts are shown. The thin lines indicate H-bonds.

- 15 **Figure 11** shows mutated residues and the antigenic epitope on CD154 for 5c8 mAb.

- (A) The solvent accessible surface shown with a dotted, darker surface represents the antigenic epitope. The representation of the antigenic epitope is on the monomer on the right side of the Figure. The two monomers of CD154 shown are in space-filling representation and are colored blue (on the left side of the Figure) and grey (on the right side of the Figure) respectively.

- 25 (B) Space-filling representation of CD154 indicating the position of mutated residues. The effects of the mutations are color-coded according to the data for 5c8 mAb binding in Table 2 in Example 2: green (+), yellow (+/-), red (-).

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DETAILED DESCRIPTION OF THE INVENTION

The following discussion illustrates and exemplifies the variety of contexts and circumstances in which the invention can be practiced, as well as  
5 providing specific embodiments of the invention.

Throughout this specification and claims, the word "comprise," or variations such as "comprises" or "comprising," will be understood to imply the inclusion of a stated integer or group of integers but not the  
10 exclusion of any other integer or group of integers.

AMINO ACID ABBREVIATIONS

	A	=	Ala	=	Alanine
	V	=	Val	=	Valine
	L	=	Leu	=	Leucine
15	I	=	Ile	=	Isoleucine
	P	=	Pro	=	Proline
	F	=	Phe	=	Phenylalanine
	W	=	Trp	=	Tryptophan
	M	=	Met	=	Methionine
20	G	=	Gly	=	Glycine
	S	=	Ser	=	Serine
	T	=	Thr	=	Threonine
	C	=	Cys	=	Cysteine
	Y	=	Tyr	=	Tyrosine
25	N	=	Asn	=	Asparagine
	Q	=	Gln	=	Glutamine
	D	=	Asp	=	Aspartic Acid
	E	=	Glu	=	Glutamic Acid
	K	=	Lys	=	Lysine
30	R	=	Arg	=	Arginine



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H = His = Histidine

Applicants have solved the three-dimensional structure of a CD154/anti-CD154 antibody complex using high resolution X-ray crystallography. Importantly, this has provided, for the first time, the information about the shape and structure of both the binding site of CD154 (specifically, human CD154) for an anti-CD154 antibody (specifically, monoclonal antibody 5c8) and the binding site of an anti-CD154 antibody (specifically, monoclonal antibody 5c8) for CD154.

#### Compositions and Crystals

According to a preferred embodiment, the compositions of this invention are crystallizable. Those compositions comprise a CD154 polypeptide in complex with an antibody that specifically binds CD154 (an anti-CD154 antibody), or an antigen binding fragment thereof.

The CD154 polypeptide portion of the complex is any CD154 polypeptide capable of specifically binding to an anti-CD154 antibody, preferably an antibody that is capable of blocking the interaction between CD40 and CD154. In a preferred embodiment, the CD154 polypeptide comprises the extracellular domain, or a portion thereof, of CD154. In another preferred embodiment, the CD154 polypeptide comprises a polypeptide consisting of CD154 amino acid residues 116 to 261. See Figure 8. In a preferred embodiment, the CD154 is human CD154. In another preferred embodiment, the crystallizable composition comprises a trimer of CD154 polypeptides and three anti-CD154 antibody molecules, or antigen binding fragments thereof. A

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CD154 polypeptide could be a fusion protein comprising CD154, or a portion thereof, and one or more other proteins or polypeptides. The fusion protein could also comprise CD154, or a portion thereof, and one or  
5 more epitope tags, such as a MYC tag.

The anti-CD154 antibody portion of the complex is an antibody, or an antigen binding fragment thereof, capable of specifically binding the epitope on CD154 that is specifically bound by an antibody,  
10 preferably an antibody capable of blocking the interaction between CD40 and CD154. Preferably, the anti-CD154 antibody is a monoclonal antibody. Examples include monoclonal antibody ("mAb") 5c8 (produced by the hybridoma having ATCC Accession No. HB 10916),  
15 humanized 5c8 mAb, Fab', (Fab)<sub>2</sub> and Fab fragments of 5c8 mAb or humanized 5c8 mAb. In a more preferred embodiment, the antibody, or an antigen binding fragment thereof, binds specifically to human CD154. Examples include 5c8 mAb, humanized 5c8 mAb, and Fab',  
20 (Fab)<sub>2</sub> and Fab fragments of 5c8 mAb or humanized 5c8 mAb. An anti-CD154 antibody could be a fusion protein comprising an anti-CD154 antibody, or an antigen binding portion thereof, and one or more other proteins or polypeptides. The fusion protein could also  
25 comprise an anti-CD154 antibody, or an antigen binding portion thereof, and one or more epitope tags, such as a MYC tag.

In a preferred embodiment, the anti-CD154 antibody is a monoclonal antibody which specifically  
30 binds the 5c8 antigen, which is specifically bound by monoclonal antibody 5c8 (produced by the hybridoma having ATCC Accession No. HB 10916). 5c8 antigen is human CD154. A human CD154 DNA sequence and a human

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CD154 amino acid sequence were disclosed in Hollenbaugh et al., EMBO J., 11: 4313-4321 (1992).

An antibody that is capable of blocking the interaction between CD40 and CD154 is one that blocks  
5 the interaction of CD40, for example, cell surface CD40 (e.g., on B cells, dendritic cells, endothelial cells and other antigen presenting cells) with CD154, for example, CD154 expressed on the surface of activated T cells. CD40:CD154 binding interruptor compounds, such  
10 as anti-CD154 compounds, that are specifically contemplated include polyclonal antibodies and monoclonal antibodies, as well as antibody derivatives such as chimeric molecules, humanized molecules, molecules with altered (e.g., reduced) effector  
15 functions, bispecific molecules, and conjugates of antibodies. In a preferred embodiment, the antibody is 5c8 mAb (produced by the hybridoma having ATCC Accession Number HB 10916, deposited on November 14, 1991), as described in United States patent 5,474,771,  
20 the disclosure of which is hereby incorporated by reference. In a highly preferred embodiment, the antibody is a humanized 5c8 mAb. Other known antibodies against CD154 include, for example, antibodies ImxM90, ImxM91 and ImxM92 (described in  
25 United States patent 5,961,974). Numerous additional anti-CD154 antibodies have been produced and characterized (see, e.g., PCT patent application WO96/23071 of Bristol-Myers Squibb, the specification of which is hereby incorporated by reference). The  
30 selection of an appropriate monoclonal antibody will depend on the animal species from which CD154 is derived and the species specificity of the anti-CD154 monoclonal antibody (for example, 5c8 mAb, produced by

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the hybridoma having ATCC Accession No. HB 10916 and raised against human CD154, specifically binds to human and some non-human primate CD154 molecules but not to mouse CD154). When the CD154 is mouse CD154 (known as gp39), an antibody that binds mouse CD154 should be used. An example of such an antibody is MR1 (see Noelle et al. (1992), Proc. Natl. Acad. Sci. USA 89: 6550).

The invention also includes anti-CD154 molecules of other types, such as complete Fab fragments,  $F(ab')_2$  compounds,  $V_H$  regions,  $F_V$  regions and single chain antibodies (see, e.g., PCT patent application WO96/23071) polypeptides.

Various forms of antibodies may also be produced using standard recombinant DNA techniques (Winter and Milstein, Nature 349: 293-99, 1991). For example, "chimeric" antibodies may be constructed, in which the antigen binding domain from a non-human animal antibody is linked to a human constant domain (an antibody derived initially from a nonhuman mammal in which recombinant DNA technology has been used to replace all or part of the hinge and constant regions of the heavy chain and/or the constant region of the light chain, with corresponding regions from a human immunoglobulin light chain or heavy chain) (see, e.g., Cabilly et al., United States patent 4,816,567; Morrison et al., Proc. Natl. Acad. Sci. 81: 6851-55, 1984).

In addition, recombinant "humanized" antibodies may be synthesized. Humanized antibodies are antibodies initially derived from a nonhuman mammal in which recombinant DNA technology has been used to substitute some or all of the amino acids not required

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for antigen binding with amino acids from corresponding regions of a human immunoglobulin light or heavy chain. Such antibodies are chimeras comprising mostly human immunoglobulin sequences into which the regions  
5 responsible for specific antigen binding have been inserted (see, e.g., PCT patent applications W090/07861 and W094/04679, the disclosures of which are incorporated hereby by reference). Animals are immunized with the desired antigen, the corresponding  
10 antibodies are isolated and the portions of the variable region sequences responsible for specific antigen binding are removed. The animal-derived antigen binding regions are then cloned into the appropriate position of the human antibody genes from  
15 which the antigen binding regions have been deleted. Humanized antibodies minimize the use of heterologous (inter-species) sequences in antibodies targeted for human therapies, and are less likely to elicit unwanted immune responses. Primatized antibodies can be  
20 produced similarly using primate (e.g., rhesus, baboon and chimpanzee) antibody genes.

Another embodiment of the invention includes the use of human antibodies, which can be produced in nonhuman animals, such as transgenic animals harboring  
25 one or more human immunoglobulin transgenes. Such animals may be used as a source for splenocytes for producing hybridomas, as described in United States patent 5,569,825.

Antibody fragments and univalent antibodies  
30 are also contemplated by this invention. Univalent antibodies comprise a heavy chain/light chain dimer bound to the Fc (or stem) region of a second heavy chain. "Fab region" refers to those portions of the

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chains which are roughly equivalent, or analogous, to the sequences which comprise the Y branch portions of the heavy chain and to the light chain in its entirety, and which collectively (in aggregates) have been shown to exhibit antibody activity. A Fab protein includes aggregates of one heavy and one light chain (commonly known as Fab'), as well as tetramers which correspond to the two branch segments of the antibody Y, (commonly known as F(ab)<sub>2</sub>), whether any of the above are covalently or non-covalently aggregated, so long as the aggregation is capable of selectively reacting with a particular antigen or antigen family.

In addition, standard recombinant DNA techniques can be used to alter the binding affinities of recombinant antibodies with their antigens by altering amino acid residues in the vicinity of the antigen binding sites. The antigen binding affinity of a humanized antibody may be increased by mutagenesis based on molecular modeling (Queen et al., Proc. Natl. Acad. Sci. 86:10029-33, 1989; PCT patent application WO94/04679, which are hereby incorporated by reference). This may also be done utilizing phage display technology (see, e.g., Winter et al., Ann. Rev. Immunol. 12:433-455, 1994; and Schier et al., J. Mol. Biol. 255:28-43, 1996, which are hereby incorporated by reference).

Crystal Structures and Methods Using the Structure Coordinates That Define the Three-dimensional Structure of a CD154/anti-CD154 Antibody Complex

The crystallizable compositions provided by this invention are amenable to X-ray crystallography. Therefore, this invention also encompasses crystals of the crystallizable compositions. This invention also

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provides the three dimensional structure as obtained by X-ray crystallography of a CD154/anti-CD154 antibody complex at high resolution, such as at 3.1Å resolution.

See Example 1. In a preferred embodiment, the CD154 polypeptide is the extracellular domain of human CD154 (for example, amino acids 116 to 261) and the anti-CD154 antibody, or an antigen binding fragment thereof, is the Fab fragment of humanized 5c8 mAb.

The three dimensional structures of other crystallizable compositions of this invention may also be determined by X-ray crystallography using X-ray crystallographic techniques routine in the art.

X-ray crystallography is a collection of techniques which allow the determination of the structure of a molecular entity. The techniques include crystallization of the entity, collection and processing of X-ray diffraction intensities, determination of phases (by, e.g., multiple isomorphous replacement, molecular replacement or difference Fourier techniques) and model building and refinement.

The three-dimensional structure of the extracellular domain of a CD154/Fab fragment of humanized 5c8 mAb complex is defined by a set of structure coordinates as set forth in Figure 4. The term "structure coordinates" refers to Cartesian atomic coordinates derived from mathematical equations related to the patterns obtained on diffraction of a monochromatic beam of X-rays by the atoms (scattering centers) of an extracellular domain of a CD154/Fab fragment of humanized 5c8 mAb complex in crystal form. The diffraction data are used to calculate an electron density map of the repeating unit of the crystal. The electron density maps are then used to establish the

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individual atoms of the extracellular domain of a CD154/Fab fragment of humanized 5c8 mAb complex.

As shown in **Example 1**, the epitope (also referred to as the antigenic epitope herein) on CD154  
5 for 5c8 mAb comprises CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250.

A binding site defined by structure coordinates of CD154 amino acids Glu129, Ala130,  
10 Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, can bind to, inter alia, 5c8 mAb, and antigen binding fragments thereof, as well as hu5c8 mAb, and antigen binding fragments thereof.

15 One embodiment of the present invention provides a molecular complex comprising a first binding site defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249  
20 and Gly250 according to Figure 4; or a homologue of said molecular complex, wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å, preferably between 0.00Å  
25 and 1.00Å, more preferably between 0.00Å and 0.50Å. The first binding site was calculated with the program CONTACT (Navaja, J. (1994) Acta Crystallogr. A 50, 157-163) from the CCP4 program package (Collaborative Computational project No. 4. The CCP4 Suite: programs  
30 for protein crystallography Acta Cryst. D 50, 760-763). The program found all residues whose distance from contact residues of the other molecule of the complex was between 1 and 3.6 Angstroms. The first and/or the



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second binding site may be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof.

Another embodiment of the present invention provides a molecular complex comprising a first binding site, defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, that associates with one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or a homologue of said molecular complex, wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and 1.50Å, preferably between 0.00Å and 1.00Å, more preferably between 0.00Å and 0.50Å. The first binding site was calculated with the program CONTACT (Navaja, J. (1994) Acta Crystallogr. A 50, 157-163) from the CCP4 program package (Collaborative Computational project No. 4. The CCP4 Suite: programs for protein crystallography Acta Cryst. D 50, 760-763). The program found all residues whose distance from contact residues of the other molecule of the complex was between 1 and 3.6 Angstroms. The first and/or the second binding site may be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof.

Another embodiment of the present invention provides a molecular complex defined by structure coordinates of one or more anti-CD154 antibody amino

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acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or a homologue of said molecular  
5 complex, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å, preferably between 0.00Å and 1.00Å, more preferably between 0.00Å and 0.50Å.

Yet another embodiment of the present  
10 invention provides a molecular complex defined by at least a portion or all of the structure coordinates of all the CD154 and anti-CD154 antibody amino acids set forth in Figure 4, or a homologue of said molecular complex, wherein said homologue has a root mean square  
15 deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å, preferably between 0.00Å and 1.00Å, more preferably between 0.00Å and 0.50Å. This molecular complex could have a binding site and the homologue of the molecular complex could have a binding  
20 site. Either or both of said binding sites may be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof.

Those of skill in the art will understand  
25 that a set of structure coordinates for a polypeptide complex is a relative set of points that define a shape in three dimensions. Thus, it is possible that an entirely different set of coordinates could define a similar or identical shape. Moreover, slight  
30 variations in the individual coordinates will have little effect on overall shape.

The variations in coordinates discussed above may be generated due to mathematical manipulations of

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the structure coordinates. For example, the structure coordinates set forth in Figure 4 could be manipulated by crystallographic permutations of the structure coordinates, fractionalization of the structure coordinates, integer additions or subtractions to sets of the structure coordinates, inversion of the structure coordinates, or any combination thereof.

Alternatively, modification in the crystal structure due to mutations, additions, substitutions, and/or deletions of amino acids, or other changes in any of the components that make up the crystal could also account for variations in structure coordinates. If such variations are within an acceptable standard error as compared to the original coordinates, the resulting three dimensional shape is considered to be the same as that of the unmodified crystal.

Various computational analyses are therefore necessary to determine whether a molecular complex or a portion thereof is sufficiently similar to all or parts of the extracellular domain of a CD154/Fab fragment of humanized 5c8 mAb structure described above as to be considered the same. Such analyses may be carried out in current software applications, such as the Molecular Similarity application of QUANTA (Molecular Simulations Inc., San Diego, CA) version 4.1, and as described in its accompanying User's Guide.

The Molecular Similarity application permits comparisons between different structures, different conformations of the same structure, and different parts of the same structure. The procedure used in Molecular Similarity to compare structures is divided into four steps: 1) load the structures to be compared; 2) define the atom equivalences in these

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structures; 3) perform a fitting operation; and 4) analyze the results.

Each structure is identified by a name. One structure is identified as the target (i.e., the fixed structure); all remaining structures are working structures (i.e., moving structures). Since atom equivalency within QUANTA is defined by user input, for the purpose of this invention, equivalent atoms such as protein backbone atoms (N, C $\alpha$ , C and O) will be defined for all conserved residues between the two structures being compared. Also, only rigid fitting operations will be considered.

When a rigid fitting method is used, the working structure is translated and rotated to obtain an optimum fit with the target structure. The fitting operation uses an algorithm that computes the optimum translation and rotation to be applied to the moving structure, such that the root mean square difference of the fit over the specified pairs of equivalent atom is an absolute minimum. This number, given in angstroms, is reported by QUANTA.

For the purpose of this invention, any molecular complex that has a root mean square deviation of conserved residue backbone atoms (N, C $\alpha$ , C, O) between 0.00Å and 1.50Å, preferably between 0.00Å and 1.00Å, more preferably between 0.00Å and 0.50Å, when superimposed on the relevant backbone atoms described by the structure coordinates listed in Figure 4 are considered identical.

The term "root mean square deviation" means the square root of the arithmetic mean of the squares of the deviations from the mean. It is a way to express the deviation or variation from a trend or

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object. For purposes of this invention, the "root mean square deviation" defines the variation in the backbone of a protein complex from the relevant portion of the backbone of the CD154 polypeptide portion or the anti-  
5 CD154 antibody portion of the CD154/anti-CD154 antibody complex, as defined by the structure coordinates described herein.

Once the structure coordinates of a protein crystal have been determined, they are useful in  
10 solving the structures of other crystals.

In accordance with the present invention, the structure coordinates of a complex comprising the extracellular domain of CD154 and Fab fragment of, for example, humanized 5c8 mAb, and portions thereof, is  
15 stored in a machine-readable storage medium. A machine could be a computer. Such data may be used for a variety of purposes, such as drug discovery, discovery of 5c8 mAb variants with improved properties, such as improved specific binding to CD154, and X-ray  
20 crystallographic analysis of other protein crystals.

In order to use the structure coordinates generated for the CD154/anti-CD154 antibody complex or one of its binding sites or homologues thereof, it is necessary to convert them into a three-dimensional  
25 shape. This is achieved through the use of commercially available software that is capable of generating a three-dimensional graphical representation of molecular complexes, or portions thereof, from a set of structure coordinates.

30 Accordingly, one embodiment of this invention provides a machine-readable data storage medium comprising a data storage material encoded with machine-readable data comprising a portion of or the

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entire set of the structure coordinates set forth in Figure 4. A machine could be a computer. A computer which comprises the data storage medium is also provided by this invention. This invention also  
5 provides the computer with instructions to produce three-dimensional representations of the molecular complexes of CD154/anti-CD154 antibody by processing the machine-readable data of this invention. The computer of this invention further comprises a display  
10 for displaying the structure coordinates of this invention.

A computer of this invention comprises a machine-readable data storage medium encoded with machine-readable data, wherein said data comprises one  
15 of the following four structure coordinates:

- (1) the structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4;
- 20 (2) the structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, that associates with one or more anti-CD154 antibody amino acids Ser31, Tyr32,  
25 Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4;
- (3) the structure coordinates of one or more anti-CD154  
30 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or

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(4) the structure coordinates of at least a portion or all of all the CD154 and anti-CD154 antibody amino acids set forth in Figure 4;  
and said computer comprises instructions for processing  
5 said machine-readable data into a three-dimensional representation of a molecular complex of this invention, or a homologue thereof. Preferably, the computer further comprises a display for displaying said structure coordinates. Such computers produce a  
10 three dimensional representation of the molecular complexes, and homologues thereof, of this invention.

This invention also provides a computer for determining at least a portion of the structure coordinates corresponding to X-ray diffraction data  
15 obtained from a molecular complex of CD154/anti-CD154 antibody, wherein said computer comprises:

a) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises at  
20 least a portion of the structure coordinates of CD154 and/or anti-CD154 antibody according to Figure 4;

b) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises  
25 X-ray diffraction data obtained from said molecular complex; and

c) instructions for performing a Fourier transform of the machine readable data of (a) and for processing said machine readable data of (b) into  
30 structure coordinates.

Preferably, the computer further comprises a display for displaying said structure coordinates.

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This invention also provides a computer for determining at least a portion of the structure coordinates corresponding to an X-ray diffraction pattern of a molecular complex, wherein said computer  
5 comprises:

a) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises at least a portion of the structure coordinates according  
10 to Figure 4;

b) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises an X-ray diffraction pattern of said molecular complex;

15 c) a working memory for storing instructions for processing said machine-readable data of a) and b);

d) a central processing unit coupled to said working memory and to said machine-readable data  
20 of a) and b) for performing a Fourier transform of the machine readable data of (a) and for processing said machine readable data of (b) into structure coordinates; and

e) a display coupled to said central  
25 processing unit for displaying said structure coordinates of said molecular complex.

Figure 5 demonstrates one version of these embodiments. System 10 includes a computer 11 comprising a central processing unit ("CPU") 20, a  
30 working memory 22 which may be, e.g., RAM (random-access memory) or "core" memory, mass storage memory 24 (such as one or more disk drives or CD-ROM or DVD-ROM drives), one or more cathode-ray tube ("CRT")



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display terminals 26, one or more keyboards 28, one or more input lines 30, and one or more output lines 40, all of which are interconnected by a conventional bidirectional system bus 50.

5               Input hardware 36, coupled to computer 11 by input lines 30, may be implemented in a variety of ways. Machine-readable data of this invention may be inputted via the use of a modem or modems 32 connected by a telephone line or dedicated data line 34.

10           Alternatively or additionally, the input hardware 36 may comprise CD-ROM or DVD-ROM drives or disk drives 24. In conjunction with display terminal 26, keyboard 28 may also be used as an input device.

              Output hardware 46, coupled to computer 11 by  
15   output lines 40, may similarly be implemented by conventional devices. By way of example, output hardware 46 may include CRT display terminal 26 for displaying a graphical representation of a binding site of this invention using a program such as QUANTA as  
20   described herein. Output hardware might also include a printer 42, so that hard copy output may be produced, or a disk drive 24, to store system output for later use.

              In operation, CPU 20 coordinates the use of  
25   the various input and output devices 36, 46, coordinates data accesses from mass storage 24 and accesses to and from working memory 22, and determines the sequence of data processing steps. A number of programs may be used to process the machine-readable  
30   data of this invention. Such programs are discussed in reference to the computational methods of drug discovery as described herein. Specific references to components of the hardware system 10 are included as

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appropriate throughout the following description of the data storage medium.

Figure 6 shows a cross-section of a magnetic data storage medium 100 which can be encoded with a machine-readable data that can be carried out by a system such as system 10 of Figure 5. Medium 100 can be a conventional floppy diskette or hard disk, having a suitable substrate 101, which may be conventional, and a suitable coating 102, which may be conventional, on one or both sides, containing magnetic domains (not visible) whose polarity or orientation can be altered magnetically. Medium 100 may also have an opening (not shown) for receiving the spindle of a disk drive or other data storage device 24.

The magnetic domains of coating 102 of medium 100 are polarized or oriented so as to encode in manner which may be conventional, machine readable data such as that described herein, for execution by a system such as system 10 of Figure 5.

Figure 7 shows a cross-section of an optically-readable data storage medium 110 which also can be encoded with such a machine-readable data, or set of instructions, which can be carried out by a system such as system 10 of Figure 5. Medium 110 can be a conventional compact disk or DVD disk read only memory (CD-ROM or DVD-ROM) or a rewritable medium, such as a magneto-optical disk which is optically readable and magneto-optically writable. Medium 100 preferably has a suitable substrate 111, which may be conventional, and a suitable coating 112, which may be conventional, usually of one side of substrate 111.

In the case of CD-ROM, as is well known, coating 112 is reflective and is impressed with a

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plurality of pits 113 to encode the machine-readable data. The arrangement of pits is read by reflecting laser light off the surface of coating 112. A protective coating 114, which preferably is  
5 substantially transparent, is provided on top of coating 112.

In the case of a magneto-optical disk, as is well known, coating 112 has no pits 113, but has a plurality of magnetic domains whose polarity or  
10 orientation can be changed magnetically when heated above a certain temperature, as by a laser (not shown). The orientation of the domains can be read by measuring the polarization of laser light reflected from coating 112. The arrangement of the domains encodes  
15 the data as described above.

For the first time, the present invention permits the use of structure-based and rational drug design techniques to design, select, and synthesize chemical entities, compounds (such as agonists or  
20 antagonists of CD154), and 5c8 mAb variants with improved properties, such as higher or lower binding affinity for CD154 as compared to 5c8 mAb. Additionally, the present invention permits the use of structure-based or rational drug design techniques to  
25 make improvements of currently available CD154 antagonists, that are capable of binding to the extracellular domain of CD154/Fab fragment of humanized 5c8 mAb complex, or any portion thereof.

One particularly useful drug design technique  
30 enabled by this invention is iterative drug design. Iterative drug design is a method for optimizing associations between a protein and a compound (that compound includes an antibody) by determining and

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evaluating the three-dimensional structures of successive sets of protein/compound complexes.

Those of skill in the art will realize that association of natural receptors (such as CD40), or  
5 substrates with the binding sites of their corresponding ligand (such as CD154, which is also known as CD40 ligand) or enzymes is the basis of many biological mechanisms of action. Similarly, many drugs (which include mAbs) exert their biological effects  
10 through association with the binding sites of, for example, ligands (such as CD154), receptors and enzymes. Such associations may occur with all or any parts of the binding sites. For example, 5c8 mAb binds to CD154 and blocks the interaction between CD154 and  
15 CD40. An understanding of such associations enables the design of drugs having more favorable associations with their target ligand, receptor or enzyme, and thus, improved biological effects. Therefore, this information is valuable in designing potential chemical  
20 entities or inhibitors (including compounds and antibodies, such as, inter alia, 5c8 mAb variants and variants of other anti-CD154 antibodies) of ligands, receptors or enzymes.

The term "binding site", as used herein,  
25 refers to a region of a protein, that, as a result of its shape, favorably associates with another protein, a chemical entity, a compound or an antibody, and an antigen binding fragment thereof. For example, the binding site on CD154 for 5c8 mAb is the epitope of 5c8  
30 mAb. This binding site could also be the binding site of a chemical entity, a compound or variant of 5c8 mAb, or antigen binding fragments thereof. CD154 also has a binding site for CD40.

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The term "associating with" refers to a condition of proximity between two or more chemical entities, compounds and proteins, or portions thereof. The association may be non-covalent -- wherein the  
5 juxtaposition is energetically favored by hydrogen bonding or van der Waals or electrostatic interactions -- or it may be covalent.

In iterative drug design, crystals of a series of protein/compound or antibody complexes are  
10 obtained and then the three-dimensional structure of each new complex is solved. Such an approach provides insight into the association between the proteins and compounds or antibodies of each new complex. This is accomplished by selecting compounds or antibodies with  
15 inhibitory activity, obtaining crystals of the new protein/compound or antibody complex, solving the three-dimensional structure of the complex, and comparing the associations between the new protein/compound or antibody complex and previously  
20 solved protein/compound or antibody complexes. By observing how changes in the compound or antibody affect the protein/compound or antibody associations, these associations may be optimized.

In some cases, iterative drug design is  
25 carried out by forming successive protein-compound or antibody complexes and then crystallizing each new complex. Alternatively, a pre-formed protein crystal is soaked in the presence of an inhibitor, thereby forming a protein/compound complex and obviating the  
30 need to crystallize each individual protein/compound or antibody complex.

The structure coordinates set forth in Figure 4 can also be used to aid in obtaining

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structural information about another crystallized molecular complex. This may be achieved by any of a number of well-known techniques, including molecular replacement. This method is especially useful for  
5 determining the structures of CD154 or anti-CD154 antibody mutants and homologues.

The structure coordinates set forth in Figure 4 can also be used for determining at least a portion of the three-dimensional structure of a  
10 molecular complex which contains at least some structural features similar to at least a portion of a CD154 anti-CD154 complex. In particular, structural information about another crystallized molecular complex may be obtained. This may be achieved by any  
15 of a number of well-known techniques, including molecular replacement.

Therefore, another embodiment of this invention provides a method of utilizing molecular replacement to obtain structural information about a  
20 crystallized molecular complex whose structure is unknown comprising the steps of:

- a) generating an X-ray diffraction pattern from said crystallized molecular complex; and
- b) applying at least a portion of the  
25 structure coordinates set forth in Figure 4 to the X-ray diffraction pattern to generate a three-dimensional electron density map of the molecular complex whose structure is unknown.

Preferably, the crystallized molecular  
30 complex comprises a CD154 polypeptide and an anti-CD154 antibody polypeptide.

By using molecular replacement, all or part of the structure coordinates of the extracellular

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domain of the CD154/Fab fragment of the humanized 5c8 mAb complex provided by this invention (and set forth in Figure 4) can be used to determine the structure of a crystallized molecular complex whose structure is unknown more rapidly and efficiently than attempting to determine such information ab initio. This method is especially useful in determining the structure of CD154 and anti-CD154 antibody mutants and homologues.

Molecular replacement provides an accurate estimation of the phases for an unknown structure. Phases are a factor in equations used to solve crystal structures that cannot be determined directly. Obtaining accurate values for the phases, by methods other than molecular replacement, is a time-consuming process that involves iterative cycles of approximations and refinements and greatly hinders the solution of crystal structures. However, when the crystal structure of a protein containing at least a homologous portion has been solved, the phases from the known structure provide a satisfactory estimate of the phases for the unknown structure.

Thus, molecular replacement involves generating a preliminary model of a molecular complex whose structure coordinates are unknown, by orienting and positioning the relevant portion of the extracellular domain of the CD154/Fab fragment of the humanized 5c8 mAb complex according to Figure 4 within the unit cell of the crystal of the unknown molecular complex, so as best to account for the observed X-ray diffraction pattern of the crystal of the molecule or molecular complex whose structure is unknown. Phases can then be calculated from this model and combined with the observed X-ray diffraction pattern amplitudes

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to generate an electron density map of the structure whose coordinates are unknown. This, in turn, can be subjected to any well-known model building and structure refinement techniques to provide a final,  
5 accurate structure of the unknown crystallized molecular complex [E. Lattman, "Use of the Rotation and Translation Functions", in Meth. Enzymol., 115, pp. 55-77 (1985); M. G. Rossmann, ed., "The Molecular Replacement Method", Int. Sci. Rev. Ser., No. 13,  
10 Gordon & Breach, New York (1972)].

The structure of any portion of any crystallized molecular complex that is sufficiently homologous to any portion of the extracellular domain of a CD154/Fab fragment of humanized 5c8 mAb complex  
15 can be solved by this method.

In a preferred embodiment, the method of molecular replacement is utilized to obtain structural information about a molecular complex, wherein the complex comprises a CD154-like polypeptide. Preferably  
20 the CD154-like polypeptide is CD154, a mutant thereof or a homologue thereof.

The structure coordinates of the extracellular domain of a CD154/Fab fragment of a humanized 5c8 mAb complex as provided by this invention  
25 are particularly useful in solving the structure of other crystal forms of CD154-like polypeptide, preferably other crystal forms of CD154; CD154-like polypeptide/anti-CD154 antibody-like polypeptide, preferably the extracellular domain of CD154/Fab  
30 fragment of humanized 5c8 mAb; or complexes comprising any of the above.

Such structure coordinates are also particularly useful to solve the structure of crystals



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of CD154-like polypeptide/anti-CD154 antibody-like polypeptide complexes, particularly the extracellular domain of a CD154/Fab fragment of a humanized 5c8 mAb, co-complexed with a variety of chemical entities. This approach enables the determination of the optimal sites for interaction between chemical entities and interaction of candidate CD154 agonists or antagonists with CD154 or the extracellular domain of CD154/Fab fragment of humanized 5c8 mAb complex. For example, high resolution X-ray diffraction data collected from crystals exposed to different types of solvent allows determination of the location where each type of solvent molecule resides. Small molecules that bind tightly to these sites can then be designed and synthesized and tested for their CD154 antagonist activity.

All of the complexes referred to above may be studied using well-known X-ray diffraction techniques and may be refined versus 1.5-3.5 Å resolution X-ray data to an R value of about 0.20 or less using computer software, such as X-PLOR (Yale University, ©1992, distributed by Molecular Simulations, Inc.; see, e.g., Blundell & Johnson, supra; Meth. Enzymol., vol. 114 & 115, H. W. Wyckoff et al., eds., Academic Press (1985)). This information may thus be used to optimize known CD154 antagonists, such as anti-CD154 antibodies, and more importantly, to design new or improved CD154 antagonists.

A chemical entity, a compound (including an agonist or antagonist of CD154) or a variant of the 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof, or variants of another anti-CD154 antibody, or an antigen

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binding fragment thereof, can be designed by computational means by performing fitting operations. A compound includes macromolecules such as proteins or polypeptides.

5           The present invention also encompasses methods of evaluating the potential of a chemical entity to associate with a molecular complex of this invention, or a homologue of said molecular complex.

          This invention provides a method for  
10   evaluating the potential of a chemical entity to associate with a molecular complex of this invention, or a homologue of said molecular complex, comprising the steps of:

          (i)   employing computational means to  
15   perform a fitting operation between the chemical entity and a binding site (the binding site could be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof) of the molecular complex or a binding site of  
20   the homologue of the molecular complex; and

          (ii)   analyzing the results of said fitting operation to quantify the association between the chemical entity and either binding site.

          The present invention also encompasses  
25   methods for identifying a potential agonist or antagonist of CD154 comprising the steps of:

          a)    using the structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246,  
30   Ser248, His249 and Gly250 according to Figure 4  $\pm$  a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and 1.50Å,

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- preferably between 0.00Å and 1.00Å, more preferably between 0.00Å and 0.50Å; or  
using the structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146,  
5 Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, that associate with one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36,  
10 Ser95 and Trp96 of the light chain according to Figure 4 ± a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and 1.50Å, preferably between 0.00Å and 1.00Å, more preferably between 0.00Å and 0.50Å; or  
15 using at least a portion of the structure coordinates of all the amino acids of CD154 and anti-CD154 antibody according to Figure 4 ± a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å, preferably between 0.00Å and 1.00Å,  
20 more preferably between 0.00Å and 0.50Å;  
to generate a three-dimensional structure of a molecular complex comprising a binding site (the binding site could be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an  
25 antigen binding fragment thereof);  
b) employing said three-dimensional structure to design or select said potential agonist or antagonist;  
c) synthesizing said potential agonist or  
30 antagonist; and  
d) contacting said potential agonist or antagonist with CD154 to determine the ability of said potential agonist or antagonist to bind to (interact

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with) CD154; or contacting said potential agonist or antagonist with CD154 under conditions that permit said potential agonist or antagonist to interact with (bind to) CD154, if said potential agonist or antagonist is  
5 capable of binding to CD154.

This method could further comprise the step of:

e) determining whether said potential antagonist interrupts CD40:CD154 interaction.

10 A potential agonist or a potential antagonist is a compound. A compound can be a macromolecule, such as a protein or a polypeptide.

This invention also encompasses methods for evaluating the potential of a variant of 5c8 mAb, or an  
15 antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof, or another anti-CD154 antibody, or an antigen binding fragment thereof, to associate with a molecular complex of this invention or a homologue of said molecular complex;  
20 comprising the steps of:

(i) employing computational means to perform a fitting operation between the variant and a binding site (the binding site could be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or  
25 hu5c8 mAb, or an antigen binding fragment thereof) of a molecular complex of this invention or a binding site (the binding site could be a binding site for 5c8 mAb, or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof) of a homologue  
30 of the molecular complex; and

(ii) analyzing the results of said fitting operation to quantify the association between

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the binding site of the molecular complex or the binding site of the homologue of the molecular complex.

Thus, the present invention provides 5c8 mAb variants (or variants of other anti-CD154 antibodies) with improved properties as compared to 5c8 mAb, such as increased or decreased binding affinity for CD154.

The present invention also encompasses the chemical entities, compounds, such as agonists or antagonists of CD154 or variants of 5c8 mAb (or other anti-CD154 antibodies), or an antigen binding fragment thereof, or hu5c8 mAb, or an antigen binding fragment thereof, identified by the methods of this invention.

For the first time, the present invention permits the use of molecular design techniques to design, select and synthesize chemical entities, compounds, including agonists or antagonists of CD154, and variants of 5c8 mAb (or another anti-CD154 antibody), and antigen binding fragments thereof, capable of binding to CD154, including CD40:CD154 binding interruptors.

The design of chemical entities, compounds including agonists or antagonists of CD154 and variants of 5c8 mAb (or another anti-CD154 antibody), and antigen binding fragments thereof, that bind to CD154 according to this invention generally involves consideration of two factors. First, the chemical entity, compound or 5c8 mAb variant must be capable of physically and structurally associating with CD154. Non-covalent molecular interactions important in the association of a protein, such as CD154, with its binding partner include hydrogen bonding, van der Waals and hydrophobic interactions.

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Second, the chemical entity, compound or 5c8 mAb variant must be able to assume a conformation that allows it to associate with CD154 directly. Although certain portions of the chemical entity, compound or 5c8 mAb variant or humanities 5c8 mAb variant will not directly participate in these associations, those portions of the chemical entity, 5c8 mAb variant or compound may still influence the overall conformation of the molecule. This, in turn, may have a significant impact on potency. Such conformational requirements include the overall three-dimensional structure and orientation of the chemical entity, 5c8 mAb variant or compound in relation to all or a portion of the binding site, e.g., active site or accessory binding site of CD154, or the spacing between functional groups of a compound comprising several chemical entities that directly interact with CD154.

The potential binding effect on CD154 or CD40:CD154 binding interruption of a chemical entity, compound or 5c8 mAb variant can be analyzed prior to its actual synthesis or generation and testing by the use of computer modeling techniques. If the theoretical structure of the given entity or compound or 5c8 mAb variant suggests insufficient interaction and association with CD154, synthesis and testing of the entity or compound or generation and testing of 5c8 mAb variant is obviated. However, if computer modeling indicates a strong interaction, the entity, compound or 5c8 mAb variant may then be generated and tested for its ability to bind to CD154 and interrupt its association with CD40 using the assays described below. In this manner, generation of inoperative entities, compounds or 5c8 mAb variants may be avoided.

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A CD154-binding entity, compound or variant of 5c8 mAb or humanized 5c8 mAb, or antigen binding fragments of either, can be computationally evaluated and designed by means of a series of steps in which  
5 chemical entities or fragments are screened and selected for their ability to associate with the binding sites of CD154 as defined by this invention.

One skilled in the art can use one of several methods to screen chemical entities or fragments for  
10 their ability to associate with CD154 and more particularly with the binding sites of CD154. This process may begin by visual inspection of, for example, the binding sites for anti-CD154 antibody, on the computer screen based on the CD154 coordinates in  
15 Figure 4 generated from the machine-readable storage medium. Selected fragments or chemical entities may then be positioned in a variety of orientations, or docked, within an individual binding site of CD154, as defined supra. Docking may be accomplished using  
20 software such as Quanta or Sybyl, followed by energy minimization and molecular dynamics with standard molecular mechanics forcefields, such as CHARMM and AMBER.

Specialized computer programs may also assist  
25 in the process of selecting fragments or chemical entities. These include, inter alia:

1. GRID (Goodford, P.J., "A Computational Procedure for Determining Energetically Favorable Binding Sites on Biologically Important Macromolecules", J. Med. Chem., 28, pp. 849-857 (1985)). GRID is  
30 available from Oxford University, Oxford, UK.
2. MCSS (Miranker, A. and M. Karplus, "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method." Proteins:  
35 Structure, Function and Genetics, 11, pp. 29-34

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(1991)). MCSS is available from Molecular Simulations, Burlington, MA.

3. AUTODOCK (Goodsell, D.S. and A.J. Olsen, "Automated Docking of Substrates to Proteins by Simulated Annealing", Proteins: Structure, Function, and Genetics, 8, pp. 195-202 (1990)). AUTODOCK is available from Scripps Research Institute, La Jolla, CA.
4. DOCK (Kuntz, I.D. et al., "A Geometric Approach to Macromolecule-Ligand Interactions", J. Mol. Biol., 161, pp. 269-288 (1982)). DOCK is available from University of California, San Francisco, CA.

Once suitable chemical entities or fragments have been selected, they can be assembled into a single compound. Assembly may proceed by visual inspection of the relationship of the fragments to each other on the three-dimensional image displayed on a computer screen in relation to the structure coordinates of CD154. This is followed by manual model building using software such as Quanta or Sybyl.

The above-described evaluation process for chemical entities may be performed in a similar fashion for chemical compounds and 5c8 mAb variants.

Useful programs to aid one of skill in the art in connecting the individual chemical entities or fragments include:

1. CAVEAT (Bartlett, P.A. et al, "CAVEAT: A Program to Facilitate the Structure-Derived Design of Biologically Active Molecules". In "Molecular Recognition in Chemical and Biological Problems", Special Pub., Royal Chem. Soc., 78, pp. 182-196 (1989)). CAVEAT is available from the University of California, Berkeley, CA.
2. 3D Database systems such as MACCS-3D (MDL Information Systems, San Leandro, CA). This area is reviewed in Martin, Y.C., "3D Database Searching in Drug Design", J. Med. Chem., 35, pp. 2145-2154 (1992)).



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3. HOOK (available from Molecular Simulations, Burlington, MA).

Instead of proceeding to build a CD154 antagonist or a CD154 binding compound in a step-wise fashion one fragment or chemical entity at a time, as described above, CD154 antagonists or other CD154 binding compounds, including variants of 5c8 mAb or humanized 5c8 mAb, or antigen binding fragments of either, may be designed as a whole or "de novo" using either an empty binding site or optionally including some portion(s) of a known antagonist(s) of CD154 or a CD154 binding compound. These methods include:

1. LUDI (Bohm, H.-J., "The Computer Program LUDI: A New Method for the De Novo Design of Enzyme Inhibitors", J. Comp. Aid. Molec. Design, 6, pp. 61-78 (1992)). LUDI is available from Biosym Technologies, San Diego, CA.
2. LEGEND (Nishibata, Y. and A. Itai, Tetrahedron, 47, p. 8985 (1991)). LEGEND is available from Molecular Simulations, Burlington, MA.
3. LeapFrog (available from Tripos Associates, St. Louis, MO).

Other molecular modeling techniques may also be employed in accordance with this invention. See, e.g., Cohen, N.C. et al., "Molecular Modeling Software and Methods for Medicinal Chemistry, J. Med. Chem., 33, pp. 883-894 (1990). See also Navia, M.A. and M.A. Murcko, "The Use of Structural Information in Drug Design", Current Opinions in Structural Biology, 2, pp. 202-210 (1992).

Once an entity, compound or variant of 5c8 mAb or humanized 5c8 mAb, or antigen binding fragments of either, has been designed or selected by the above methods, the efficiency with which that entity, compound or 5c8 mAb variant may bind to CD154 can be

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tested and optimized by computational evaluation. For example, a compound that has been designed or selected to function as a CD154 binding compound must also preferably traverse a volume not overlapping that occupied by the binding site when it is bound to the native CD154. An effective CD154 binding compound must preferably demonstrate a relatively small difference in energy between its bound and free states (i.e., a small deformation energy of binding). Thus, the most efficient CD154 binding compound should preferably be designed with a deformation energy of binding of not greater than about 10 kcal/mole, preferably, not greater than 7 kcal/mole. CD154 binding compounds may interact with the CD154 in more than one conformation that is similar in overall binding energy. In those cases, the deformation energy of binding is taken to be the difference between the energy of the free compound and the average energy of the conformations observed when the compound binds to the protein.

A compound designed or selected as binding to CD154 may be further computationally optimized so that in its bound state it would preferably lack repulsive electrostatic interaction with the target protein. Such non-complementary (e.g., electrostatic) interactions include repulsive charge-charge, dipole-dipole and charge-dipole interactions. Specifically, the sum of all electrostatic interactions between the compound and the protein when the compound is bound to CD154, preferably make a neutral or favorable contribution to the enthalpy of binding.

Specific computer software is available in the art to evaluate compound deformation energy and electrostatic interaction. Examples of programs

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designed for such uses include: Gaussian 92, revision C (M.J. Frisch, Gaussian, Inc., Pittsburgh, PA ©1992); AMBER, version 4.0 (P.A. Kollman, University of California at San Francisco, ©1994); QUANTA/CHARMM  
5 (Molecular Simulations, Inc., Burlington, MA ©1994); and Insight II/Discover (Biosym Technologies Inc., San Diego, CA ©1994). These programs may be implemented, for instance, using a Silicon Graphics workstation, IRIS 4D/35 or IBM RISC/6000 workstation  
10 model 550. Other hardware systems and software packages will be known to those skilled in the art.

Once a CD154-binding compound has been optimally selected or designed, as described above, substitutions may then be made in some of its atoms or  
15 side groups to improve or modify its binding properties. Generally, initial substitutions are conservative, i.e., the replacement group will have approximately the same size, shape, hydrophobicity and charge as the original group. It should, of course, be  
20 understood that components known in the art to alter conformation should be avoided. Such substituted chemical compounds may then be analyzed for efficiency of fit to CD154 by the same computer methods described in detail above.

25 Another approach made possible and enabled by this invention is computational screening of small molecule data-bases for chemical entities or compounds that can bind in whole, or in part, to CD154. In this screening, the quality of fit of such entities to the  
30 binding site may be judged either by shape complementarity or by estimated interaction energy. Meng, E.C. et al., J. Comp. Chem., 13, pp. 505-524 (1992).

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Compounds

The compounds of this invention can be synthetic compounds. In one embodiment, a synthetic compound designed by methods of this invention

5 preferably has a molecular weight equal to or under about 1000 daltons. A synthetic compound designed by methods of this invention preferably is soluble under physiological conditions. A synthetic compound

10 designed by methods of this invention preferably is bioavailable. A synthetic compound designed by methods of this invention is preferably orally administrable. A synthetic compound designed by methods of this invention preferably is able to bind its target (CD154) when the target is present at physiological

15 concentrations. A synthetic compound designed by methods of this invention preferably is non-toxic or has a medically acceptable toxicity.

20 Assays for Confirming that Compounds Bind and Interrupt CD40:CD154 Interaction

A person skilled in the art is aware of conventional assays for assessing whether the entities, compounds, 5c8 mAb variants or humanized 5c8 mAb variants designed according to the methods of this

25 invention bind specifically to CD154 and whether they interrupt CD40:CD154 interaction. These assays detect whether, or the extent to which, B cells are activated by activated T cells via the interaction between CD154 and CD40. For example, monitoring of CD23 levels on B

30 cells, or secretion of immunoglobulins by B cells is indicative of activation of B cells by activated T cells via the interaction between CD40 and CD154. See, e.g., United States patent 5,474,771. Accordingly,

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examples of such assays are: in vitro assays for blocking CD40 and CD154 interaction, in vitro assays for T cell activation of B cells; in vitro assays for immunoglobulin production by B cells and in vivo assays  
5 for inhibition of a humoral immune response.

Conditions Associated with Inappropriate CD154 Induced Activation in a Subject

The chemical entities and compounds designed according to this invention, including agonists or  
10 antagonists of CD154, 5c8 mAb variants and humanized 5c8 mAb variants can be used to prevent or treat subjects having conditions associated with inappropriate CD154 induced activation. Treating a condition associated with inappropriate CD154 induced  
15 activation in a subject includes, inter alia, attenuating severity of the condition, suppressing effects of the condition, inhibiting the condition and reversing the condition.

Examples of conditions associated with inappropriate CD154 mediated activation in a subject,  
20 include, inter alia: an unwanted immune response, an unwanted inflammatory response, an autoimmune disease, an allergy, an inhibitor response to a therapeutic agent, rejection of a donor organ and a B cell cancer.

25 Examples of conditions associated with inappropriate CD154 mediated activation in a subject, include, inter alia: systemic lupus erythematosus, lupus nephritis, lupus neuritis, asthma, chronic obstructive pulmonary disease, bronchitis, emphysema,  
30 multiple sclerosis, uveitis, Alzheimer's disease, traumatic spinal cord injury, stroke, atherosclerosis, coronary restenosis, ischemic congestive heart failure,

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cirrrosis, hepatitis C, diabetic nephropathy, glomerulonephritis, osteoarthritis, rheumatoid arthritis, psoriasis, atopic dermatitis, systemic sclerosis, radiation-induced fibrosis, Crohn's disease,  
5 ulcerative colitis, multiple myeloma and cachexia.

### Subjects

The novel CD40:CD154 binding interruptors designed according to this invention can be administered for treatment or prophylaxis to any  
10 mammalian subject suffering or about to suffer a condition associated with inappropriate CD154 activation. Preferably, the subject is a primate, more preferably a higher primate, most preferably a human. In other embodiments of this invention, the subject may  
15 be a mammal of commercial importance, or a companion animal or other animal of value, such as a member of an endangered species. Thus, a subject may be, inter alia, sheep, horses, cattle, goats, pigs, dogs, cats, rabbits, guinea pigs, hamsters, gerbils, rats and mice.

### 20 Route of Administration

The CD40:CD154 binding interruptors designed according to this invention may be administered in any manner which is medically acceptable. Depending on the specific circumstances, local or systemic  
25 administration may be desirable. Local administration may be, for example, by subconjunctival administration. Preferably, the interruptor is administered via an oral, an enteral, or a parenteral route such as by an intravenous, intraarterial, subcutaneous,  
30 intramuscular, intraorbital, intraventricular, intraperitoneal, subcapsular, intracranial, intraspinal, topical or intranasal injection, infusion

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or inhalation. The interruptor also may be administered by implantation of an infusion pump, or a biocompatible or bioerodible sustained release implant, into the subject.

5 Dosages and Frequency of Treatment

Generally, the methods described herein involve administration of the CD40:CD154 binding interruptor at desired intervals (e.g., daily, twice weekly, weekly, biweekly, monthly or at other intervals  
10 as deemed appropriate) over at least a two- or three-week period. The administration schedule is adjusted as needed to treat the condition associated with inappropriate or abnormal CD154 activation in the subject. The present treatment regime can be repeated  
15 in the event of a subsequent episode of illness.

A CD40:CD154 binding interruptor designed using the methods of this invention may be administered in a pharmaceutically effective, prophylactically effective or therapeutically effective amount, which is  
20 an amount sufficient to produce a detectable, preferably medically beneficial effect on a subject at risk or afflicted with a condition associated with inappropriate or abnormal CD154 activation. Medically beneficial effects include preventing, inhibiting,  
25 reversing or attenuating deterioration of, or detectably improving, the subject's medical condition. The amount and frequency of dosing for any particular compound to be administered to a patient for a given immunological condition associated with inappropriate  
30 or abnormal CD154 induced activation in a subject is within the skills and clinical judgement of ordinary practitioners of the medical and pharmaceutical arts.

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The general dosage and administration regime may be established by preclinical and clinical trials, which involve extensive but routine studies to determine the optimal administration parameters of the compound.

- 5 Even after such recommendations are made, the practitioner will often vary these dosages for different subjects based on a variety of considerations, such as the individual's age, medical status, weight, sex, and concurrent treatment with  
10 other pharmaceuticals. Determining the optimal dosage and administration regime for each CD40:CD154 binding interruptor used is a routine matter for those of skill in the medical and pharmaceutical arts.

- Generally, the frequency of dosing may be  
15 determined by an attending physician or similarly skilled practitioner, and might include periods of greater dosing frequency, such as at daily or weekly intervals, alternating with periods of less frequent dosing, such as at monthly or longer intervals.

- 20 To exemplify dosing considerations for a CD40:CD154 binding interruptor, the following examples of administration strategies, for an anti-CD154 mAb, serve as a guide. The dosing amounts could easily be adjusted or adapted for other types of anti-CD154  
25 compounds. In general, single dosages of between about 0.05 and about 50 mg/kg patient body weight are contemplated, with dosages most frequently in the 1-20 mg/kg range. For acute treatment, such as before or at the time of transplantation, or in response to any  
30 evidence that graft rejection is beginning, an effective dose of a novel CD40:CD154 binding interruptor compound of this invention may be patterned on that of a representative antibody (such as 5c8 mAb),



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ranges from about 1 mg/kg body weight to about 20 mg/kg body weight, administered daily for a period of about 1 to 5 days, preferably by bolus intravenous administration. The same dosage and dosing schedule  
5 may be used in the load phase of a load-maintenance regimen, with the maintenance phase involving intravenous or intramuscular administration of antibodies in a range of about 0.1 mg/kg body weight to about 20 mg/kg body weight, for a treatment period of  
10 anywhere from weekly to 3 month intervals. Chronic treatment may also be carried out by a maintenance regimen, patterned on those in which antibodies are administered by intravenous or intramuscular route, in a range of about 0.1 mg/kg body weight to about 20  
15 mg/kg body weight, with interdose intervals ranging from about 1 week to about 3 months. In addition, chronic treatment may be effected by an intermittent bolus intravenous regimen, patterned on those in which between about 1.0 mg/kg body weight and about 100 mg/kg  
20 body weight of antibodies are administered, with the interval between successive treatments being from 1 to 6 months. For all except the intermittent bolus regimen, administration may also be by oral, pulmonary, nasal or subcutaneous routes.

25           For treatment, a CD40:CD154 binding interruptor can be formulated in a pharmaceutical or prophylactic composition which includes, respectively, a pharmaceutically or prophylactically effective amount of the CD40:CD154 binding interruptor dispersed in a  
30 pharmaceutically acceptable carrier. In some embodiments, the pharmaceutical or prophylactic composition can also include a pharmaceutically or prophylactically effective amount of another

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immunosuppressive or immunomodulatory compound, including without limitation: an agent that interrupts T cell costimulatory signaling via CD28 (e.g., CTLA4-Ig), CD80 or CD86; an agent that interrupts  
5 calcineurin signaling (e.g., cyclosporin, a macrolide such tacrolimus, formerly known as FK506); a corticosteroid; or an antiproliferative agent (e.g., azathioprine). Other therapeutically effective compounds suitable for use with the CD40:CD154 binding  
10 interruptor include rapamycin (also known as sirolimus); mycophenolate mofetil (MMF), mizoribine, deoxyspergualin, brequinar sodium, leflunomide, azaspirane and the like.

Combination therapies according to this  
15 invention for treatment of a condition associated with inappropriate or abnormal CD154 activation in a subject include the use of a CD40:CD154 binding interruptor together with agents targeted at B cells, such as anti-CD19, anti-CD28 or anti-CD20 antibody (unconjugated or  
20 radiolabeled), IL-14 antagonists, LJP394 (LaJolla Pharmaceuticals receptor blocker), IR-1116 (Takeda small molecule) and anti-Ig idiotype monoclonal antibodies. Alternatively, the combinations may include T cell/B cell targeted agents, such as CTLA4Ig,  
25 IL-2 antagonists, IL-4 antagonists, IL-6 antagonists, receptor antagonists, anti-CD80/CD86 monoclonal antibodies, TNF, LFA1/ICAM antagonists, VLA4/VCAM antagonists, brequinar and IL-2 toxin conjugates (e.g., DAB), prednisone, anti-CD3 mAb (OKT3), mycophenolate  
30 mofetil (MMF), cyclophosphamide, and other immunosuppressants such as calcineurin signal blockers, including without limitation, tacrolimus (FK506). Combinations may also include T cell targeted agents,

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such as CD4 antagonists, CD2 antagonists and anti-IL-12 antibodies.

The immunomodulatory compound that may be co-administered with an CD40:CD154 binding interruptor to  
5 a subject with a condition associated with inappropriate or abnormal CD154 activation may be an antibody that specifically binds to a protein selected from the group consisting of CD45, CD2, IL2R, CD4, CD8 and RANK Fc.

#### 10 Formulation

In general, CD40:CD154 binding interruptors of this invention are suspended, dissolved or dispersed in a pharmaceutically acceptable carrier or excipient. The resulting therapeutic composition does not  
15 adversely affect the recipient's homeostasis, particularly electrolyte balance. Thus, an exemplary carrier comprises normal physiologic saline (0.15M NaCl, pH 7.0 to 7.4). Other acceptable carriers are well known in the art and are described, for example,  
20 in Remington's Pharmaceutical Sciences, Gennaro, ed., Mack Publishing Co., 1990. Acceptable carriers can include biocompatible, inert or bioabsorbable salts, buffering agents, oligo- or polysaccharides, polymers, viscoelastic compound such as hyaluronic acid,  
25 viscosity-improving agents, preservatives, and the like.

All references cited herein are hereby incorporated by reference.

The following are examples that illustrate  
30 the methods and compositions of this invention. These examples are included for the purposes of illustration only.

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**EXAMPLE 1                    DETERMINATION OF THE CRYSTAL STRUCTURE  
                              OF HUMANIZED 5c8 FAB-CD154 COMPLEX**

Humanized 5c8 mAb was prepared by or for Biogen, Inc. (Cambridge, MA) by the following method.

5 CDNAs encoding the variable regions of the heavy and light chains of anti-human CD154 5c8 mAb (produced by the hybridoma having ATCC Accession Number HB 10916) (as described in United States patent 5,474,771 and Lederman et al. J. Exp. Med. 175: 1091 (1992), the

10 disclosures of both of which are hereby incorporated by reference) were cloned from total cellular RNA from the murine hybridoma cells by RT-PCR. For humanization, the murine CDRs were grafted onto a homologous human variable region framework, retaining murine residues

15 deemed to be important in maintaining antigen binding, by conventional recombinant DNA technology. See sequence in **Figure 8**. Using conventional recombinant DNA technology, the DNA for the variable regions were fused to human constant regions (IgG1 heavy chain and

20 kappa light chain) and a vector for stable expression of humanized 5c8 mAb in NS0 myeloma cells was constructed. The cell line was grown and humanized 5c8 mAb was purified by conventional techniques to greater than 95% purity and shown to be biologically active by

25 binding assay and bioassays for inhibition in vitro. The humanized 5c8 mAb maintained the binding properties of the murine 5c8 mAb.

The humanized 5c8 mAb Fab fragments were produced by cleaving whole humanized 5c8 mAb with

30 papain and isolating the Fab fragments, as essentially described by the papain manufacturer (Pierce, Rockford, IL) with Pierce's Immobilized Papain (#20341) with a

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few modifications. The intact humanized 5c8 mAb was prepared at a concentration of 10 mg/ml in a buffer containing 20 mM phosphate, 10 mM EDTA and 25 mM cysteine, pH 7.0. Immobilized papain was added at an enzyme to substrate ratio of 1:50 and digestion was allowed to occur overnight at 37°C with rocking. The immobilized papain was removed and the crude digest was dialyzed against 20 mM sodium acetate buffer at pH 4.5. The Fab fragments were separated from residual intact antibody, dimeric Fab fragment, and Fc fragment by cation exchange chromatography (Poros HS/M, PerSeptive Biosystems #PO42M26) with a shallow salt gradient. The humanized 5c8 mAb Fab fragments were then buffer exchanged into PBS (14.4 mM sodium phosphate dibasic, 5.6 mM sodium phosphate monobasic, 150 mM NaCl) and purified further by size exclusion chromatography (Sephacryl S300, Pharmacia Biotech). The humanized 5c8 mAb Fab fragment comprises at least amino acids 1 to 219 of the heavy chain (Gln 1 to Lys 219 in **Figures 4 and 8**) and amino acids 1 to 215 of the light chain (Asp 1 to Arg 215 in **Figures 4 and 8**). Because the humanized 5c8 mAb Fab fragments were produced by papain digestion, the exact C-termini of the heavy and light chains of hu5c8 mAb Fab fragments were not determined. Amino acids 1 to 219 of the heavy chain and amino acids 1 to 215 of the light chain were visible in the crystal structure.

The CD154 was recombinant soluble CD154 consisting of residues 116-261 of the extracellular domain of human CD154 (Karpusas et al. Structure 3, 1031-1039 (1995) and Karpusas et al. Structure 3, 1446 (1995)). See **Figure 8**. Recombinant human soluble CD154 consisting of residues 116 to 261 was expressed

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and purified from a Pichia pastoris clone as described in Karpusas et al. Structure 3, 1031-1039 (1995) and Karpusas et al. Structure 3, 1446 (1995). The soluble CD154 was mixed with excess hu5c8 mAb Fab fragment and  
5 incubated at 37° C for 15 minutes. The uncomplexed hu5c8 mAb Fab fragment was separated from saturated CD154-hu5c8 mAb Fab complexes by size exclusion chromatography using a S200 Sephacryl column (Pharmacia, Gibco). The CD154-hu5c8 mAb Fab complexes  
10 were further concentrated to 10-15 mg/ml in PBS buffer using Centricon Plus-20 (Amicon Bioseparations, Millipore). The stoichiometry of CD154 and hu5c8 Fab fragment in the saturated complexes was verified by SDS-PAGE analysis of the complexes with and without  
15 crosslinking reagent.

In order to determine conditions of crystallization, an incomplete factorial screen (Jancarick & Kim (1991) J. Appl. Crystallogr. 24, 409-411) was set up using the Crystal Screen kits from  
20 Hampton Research (Riverside, CA). In a typical experiment, protein solution was mixed with an equal volume of reservoir solution and a drop of the mixture was suspended under a glass cover slip over the reservoir solution. Crystals were grown by vapor  
25 diffusion at room temperature by mixing a reservoir solution of 20% (w/v) PEG MME 550, 0.1 M MES pH 6.5, 0.01 zinc sulfate with equal volume of CD154-5c8 Fab complex solution. The crystals were thin and extremely fragile plates with dimensions 0.7 x 0.7 x 0.02 mm.  
30 They grew within a few days and were easy to reproduce. Some crystals were washed and dissolved and the sample was subjected to SDS-PAGE confirming that the crystals consisted of CD154-hu5c8 mAb Fab complex.

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The crystals were cryoprotected by soaking them in a solution containing 25% PEG 400, 20% PEG MME 550, 0.1 M MES pH 6.5, 0.01 zinc sulfate and frozen in the liquid nitrogen gas stream (-175°C). The procedure of crystal annealing was performed (Harp et al. (1998), Acta Cryst D 54, 622-628). Crystals were transferred quickly after freezing in a 0.3 ml solution of 25% PEG 400, 20% PEG MME 550, 0.1 M MES pH 6.5, 0.01 zinc sulfate at room temperature for 3 minutes and then were frozen again in the liquid nitrogen gas stream.

A native X-ray data set up to 3.1 Å resolution was collected from one crystal by using an R-Axis II image plate detector system (Molecular Structure Corporation, Woodlands, TX). The data were integrated and reduced using the HKL program package (Otwinowski, Z. (1993) Oscillation data reduction program., 56-62, Proceeding of the CCP4 study weekend: data collection and processing, Sawyer, L., Issacs, N. & Bailey S. eds, Daresbury Laboratory, Warrington, UK). The data collection required about 4 days. The data set was 96.1% complete and had an R-merge of 7.6%. See Table 1 for additional data statistics.

Data processing suggested a monoclinic unit cell with approximate cell dimensions  $a=224.48$  Å,  $b=129.91$  Å,  $c=96.49$  Å and  $\beta=109.6^\circ$ . The space group was identified as C2. The Matthews volume (Matthews, B.W. (1968), J.Mol.Biol. 33, 491-497) was  $3.1 \text{ Å}^3 \text{ Da}^{-1}$ , assuming a complex of a CD154 trimer and 3 Fab fragments in the asymmetric unit, with a solvent content of 60.7%. The self rotation function calculated with XPLOR (Brunger, A.T. (1992) X-PLOR Version 3.1: A system for X-ray Crystallography and NMR, Yale University Press, New Haven, CT, USA)

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exhibited a strong peak of 6.9763 at  $K=120^\circ$  which indicated that there was a 3-fold axis that was perpendicular to the ab plane of the unit cell.

Subsequent molecular replacement computing  
5 was done with the program AMoRe (Navaja, J. (1994) Acta Crystallogr. A 50, 157-163) from the CCP4 program package (Collaborative Computational Project No. 4. The CCP4 Suite: programs for protein crystallography. Acta Cryst. D 50, 760-763). The CCP4 Suite: programs  
10 for protein crystallography Acta Cryst. D 50, 760-763). Molecular graphics manipulations were done with the program QUANTA (Molecular Simulations, Inc., San Diego, CA). The coordinates for a trimer of the extracellular domain of CD154 (chains A, B and C) from the crystal  
15 structure of human CD154 (Karpusas et al. Structure 3, 1031-1039 (1995), Karpusas et al. Structure 3, 1446 (1995), United States patent application 09/180,209 and PCT patent application WO97/00895, the disclosures of all of which are hereby incorporated by reference) (PDB  
20 entry code 1aly) was used as a probe for rotation and translation searches. The coordinates of all atoms, including side chains, were included in the search model. The rotation search gave a single solution with a correlation coefficient (cc) of 24.4 that was  
25 consistent with the 3-fold axis predicted by the self-rotation search. This solution was used for a translation search that yielded a single peak with a cc of 19.0 and an R-factor of 50.7%. Using rigid body refinement, these values refined to cc of 20.0 and an  
30 R-factor of 50.3%. Subsequently searches for the humanized 5c8 mAb Fab fragment were carried out, keeping the CD154 solution fixed. A partially refined crystal structure of the uncomplexed human humanized



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5c8 mAb Fab was used as a search probe. **Figure 9** shows the structure coordinates of that crystal structure. The rotation search produced several non-prominent peaks including some related by a 3-fold axis.

- 5 Translation searches for each of these peaks confirmed that the peaks related by the 3-fold axis correspond to the correct solutions and allowed the 3 humanized 5c8 mAb Fab fragments (cc of 20.6 and an R-factor of 50.2%) to be located. Rigid body refinement of the CD154  
10 trimer and the 3 Fab fragments resulted in cc of 35.1 and an R-factor of 48.7%.

Calculation of a 2Fo-Fc electron density map (**Figure 3**) showed continuous electron density for the CD154 and Fv domains of the Fab fragments but weak or  
15 no density for the constant domains of the Fab fragments. This indicated that the constant domains of the Fab were not correctly located, apparently because the elbow angle of the Fab differed from that of the search probe. To locate the constant domain, the elbow  
20 angle of the Fab (keeping the Fv fixed) was modified in increments of 10° by using a script from the XPLOR package and the correlation coefficient was monitored. The correlation coefficient had its highest value for  
25 an elbow angle of -50°, corresponding to the approximate position of the constant domain. Subsequent rigid body refinement with XPLOR, using data in the 20-4 Å resolution range, optimized the position of the constant domain, reducing the R-factor from  
49.4% to 40.0 % (R-free = 40.5%).

- 30 All subsequent refinement computing was carried out with the XPLOR program. Five percent of the data were allocated for the calculation of R-free factor. To reduce model bias, partial models were used

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for 2Fo-Fc map calculation and model refinement. The initial partial model was subjected to simulated annealing and grouped B-factor refinement with non-crystallographic symmetry restraints. The R-work and R-free factors dropped to 27.0% and 32.0% respectively. Several cycles consisting of iterative model building, maximum likelihood positional refinement (Adams, P.D. et al. (1997) Proc. Natl. Acad. Sci. USA 94, 5018-5023) and B-factor refinement followed. Simulated annealing omit maps were calculated to confirm modeling of certain regions of the structure. Only model adjustments that resulted to a drop in the R-free factor were accepted. No bulk solvent correction was applied. The non-crystallographic symmetry restraints were removed in the final steps of refinement. The R-work and R-free factors of the final model were 23.3% and 28.5% respectively for the data ( $F > 2\sigma$ ) in the 35-3.1 Å resolution range. Stereochemistry statistics were calculated with PROCHECK (Laskowski, R.A., MacArthur, M.W., Moss, D. S., and Thornton, J.M. (1993) J. Appl. Crystallogr. 26, 283-290). Hydrogen bonds ( $< 3.6$  Å) were found with the program CONTACT (Collaborative Computational Project No. 4. The CCP4 Suite: programs for protein crystallography. Acta Cryst. D50, 760-763). The final model consisted of 13,173 atoms constituting 9 polypeptide chains (chain names are A, B, C for the 3 CD154 monomers, H, K, X for the 3 Fab heavy chains and L, M, Y for the 3 Fab light chains). **Table 1** shows the details and summary of the crystallographic analysis.

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Table 1

**Summary of crystallographic analysis****Data collection**

5	Cell dimensions a, b, c ( Å )	224.48 ,
		129.91, 96.49
	$\beta$ ( ° )	109.62
	Space group	C2
	Resolution ( Å )	35-3.1
		(3.21-3.1)†
10	Unique reflections	46508
	Completeness (%)	96.1 (87.7) †
	Average I/σ	7.52 (1.97)†
	$R_{\text{merge}}^*$ (%)	7.6 (18.8) †

**Model**

15	Number of non-H atoms	16,203
	Number of protein residues	1731
	Contents of asymmetric unit	3 Fab
		fragments,
		1 CD154 trimer
20	Average B-factor (Å <sup>2</sup> )	18.8

**Refinement**

	Resolution range used (F>2σ)	35-3.1
	R-factor (%)	23.3
	R-free (%)	28.5

25 **Stereochemistry**

	RMS deviations	
	Bond lengths (Å)	0.014
	Angles (°)	1.89

$$(*) R_{\text{merge}} = \frac{\sum_h \sum_i |I_{hi} - \bar{I}_h|}{\sum_h \bar{I}_h}$$

30 (†) Values for the highest resolution shell given in parenthesis.

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The structure of the globular part of the CD154 extracellular domain (residues 116-261) complexed with the Fab fragment of the humanized 5c8 mAb was determined at 3.1 Å resolution by molecular replacement and refined to a crystallographic R value of 23.3% (R-free 28.5%). The residues of CD154 visible in the crystal structure were amino acids 119 to 261 (Asn 119 to Leu 261 in **Figures 4 and 8**). The asymmetric unit of the crystal contained a single complex consisting of a CD154 homotrimer and three Fab fragments. Almost all residues except N-terminal residues 116-118 of CD154 were well-defined in the final 2Fo-Fc electron density map. The final model consisted of 1731 amino acid residues constituting 9 polypeptide chains and 3 zinc ions. No water molecules have been included in the model. Some electron density was observed for the carbohydrate of CD154 but was not of sufficient quality to allow modeling of carbohydrate residues. The stereochemistry was good (root mean square (r.m.s.) deviations on bond lengths is 0.014 Å and on bond angles is 1.89°). The r.m.s. positional deviation between equivalent residues from different CD154 monomers or Fab fragments was small (0.18 Å for main chain atoms) due to using non-crystallographic symmetry restraints during most of the refinement process. All non-glycine residues, except residue 183 of CD154, were in the allowed regions of the Ramachandran diagram. The average B-factor of the main chain atoms was 18.8 Å<sup>2</sup>. The constant domains of the Fab fragments have much higher B-factors (average B-factor ~29.5 Å<sup>2</sup>) compared to the variable domains (average B-factor ~14.1 Å<sup>2</sup>). This appears to be the consequence of fewer

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crystal contacts for the constant domain of the Fab fragment compared to the variable domain.

The complex had the shape of a 3-blade propeller and consisted of three hu5c8 mAb Fab molecules radially bound on a single CD154 homotrimer (**Figures 1 and 2**). The dimensions of the complex were 140 x 140 x 60 Å. The 3-fold axis of the CD154 trimer coincided with the non-crystallographic 3-fold axis of the complex. The approximate pseudo 2-fold axes of the Fab fragments, which related the heavy and light chains, intersected the 3-fold symmetry axis of the complex and had an approximate angle of 30° upward to a plane perpendicular to the 3-fold axis. When the fact that CD154 is on the cell surface is taken into consideration, this plane is expected to coincide with the cell surface.

The crystallized CD154 fragment is a homotrimeric protein and each monomer folded as  $\beta$ -sheet sandwich with Greek key topology. The overall shape of the trimer resembled that of a truncated pyramid. The structure of CD154 in the complex with the Fab was very similar to the structure of the uncomplexed human CD154 (Karpusas et al. Structure 3, 1031-1039 (1995) and Karpusas et al. Structure 3, 1446 (1995), United States patent application 09/180,209 and PCT patent application WO 97/00895). The A-A" loop of CD154 maintained the extended conformation that was observed originally in the uncomplexed CD154 crystal structure and was not typical of other members of the TNF family. It further suggests that this conformation is real and not a consequence of crystal contacts. Superimposition of uncomplexed human CD154 trimer (Karpusas et al. Structure 3, 1031-1039 (1995) and Karpusas et al.

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Structure 3, 1446 (1995), United States patent application 09/180,209 and PCT patent application WO 97/00895) (PDB entry 1aly) on the complexed CD154 trimer, showed that there were no significant

5 conformational changes of CD154 upon hu5c8 mAb Fab binding (r.m.s. deviation is 0.76 Å for main chain atoms). The biggest differences (up to 4 Å shifts) were observed in the CD and EF loops of CD154, which are located to the "top" of the truncated pyramid, away

10 from the hu5c8 Fab epitope. These loops are known to be the most mobile regions of the CD154 moiety (Karpusas et al. Structure 3, 1031-1039 (1995) and Karpusas et al. Structure 3, 1446 (1995), United States patent application 09/180,209 and PCT patent

15 application WO 97/00895) and therefore the observed differences were not likely to be a consequence of hu5c8 Fab binding. Some significant differences, particularly compensatory rotamer shifts, were observed for the side chains of a few residues of the binding

20 epitope, including Y145 and R203 residues of CD154 that were shown to be important for CD40 binding.

The Fab fragment was obtained from a humanized version of the original murine 5c8 mAb (**Figure 8**). The humanized L chain construct was based

25 on the human subgroup III k chain from hybridoma AE6-5 (Spatz, L.A. et al. (1990), J Immunol 144, 2821-8). The H chain construct was based on the subgroup I 21/28CL gene (Dersimonian, H. et al. (1987), J Immunol 139, 2496-501). The modeled Fab structure consisted of

30 residues 1-219 of the heavy chain and 1-215 of the light chain. The variable domain of hu5c8 mAb Fab can be superimposed to the variable domain of the anti-p185HER2 antibody (PDB entry 1fvd) with an r.m.s.

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positional deviation of 1.36 Å for 1040 equivalent atoms. The elbow angle of the complexed hu5c8 Fab differed by 49.9° from that of the uncomplexed hu5c8 Fab. The complementarity determining region CDR L1,  
5 CDR L2 and CDR L3 loops of the light chain have canonical structures 3, 1 and 1 respectively (Chothia et al. (1989) Nature 342, 877-883). The CDR H1 and CDR H2 loops of the heavy chain have canonical structures 1 and 2.

10           The interaction of a single Fab fragment with CD154 resulted in a total solvent accessible area of 771 Å<sup>2</sup> for CD154 and 765 Å<sup>2</sup> for the hu5c8 mAb Fab being buried, assuming a 1.4 Å solvent probe. The antigenic epitope of 5c8 mAb is located on the right-hand side of  
15 the intersubunit cleft of CD154 and is elongated and continuous. The long axis of the epitope footprint is parallel to the long axis of the CD40 binding site. Interestingly, although CD154 only exists as a trimer on the cell surface, the epitope is composed only of  
20 residues from a single monomer of CD154.

          The epitope of hu5c8 mAb Fab on CD154 consisted of residues E129, A130, S132, E142, K143, G144, Y146 of the A-A' loop; C178 of the C strand; and C218, S245, Q246, S248, H249, G250 of the G-H loop of  
25 CD154.

          The hu5c8 mAb Fab was observed to use CDR H1, CDR H2 and CDR H3 hypervariable regions as well as CDR L1 and CDR L3 to form contacts with CD154. Most of the buried surface area was contributed by the heavy chain  
30 (61%). The residues of hu5c8 Fab involved in contacts with CD154 were S31(H), Y32(H), Y33(H) of CDR H1; N52(H), S54(H), D57(H), N59(H) of CDR H2; R102(H), N103(H) of CDR H3 and S31(L), S32(L), Y36(L) of CDR L1;

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S95(L), W96(L) of CDR L3. The contacts were mixed in character. There were several polar interactions, some of which involved several main chain atoms while others involved side chain atoms (**Figure 10**). For example, the side chain of Y32(H) was observed to interact with the side chain of S132 of CD154 and the side chain of D57(H) was observed to interact with S248 of CD154. Also, the O1 atom of the N55 side chain was observed to form an H-bond with the carbonyl oxygen of Cys178 of CD154. No salt bridge interactions were found in the interface. In addition, several aromatic residues (Y146, H249 of CD154, Y32, Y33 of the heavy chain and Y36, W96 of the light chain) contribute to van der Waals contacts between CD154 and the antibody.

Based on the co-crystal structure as described in **Example 1**, the epitope for hu5c8 mAb on CD154 overlaps but is not identical with the putative CD40 binding site. This is in agreement with previous conclusions based on mutagenesis data (Garber, E. et al. (1999), J Biol Chem 274, 33545-50). For example, residues K143, and Y146, which have been identified by mutagenesis to be important for the interaction of CD154 with CD40 (Bajorath, J. et al. (1995), Biochemistry 34, 1833-44 and Singh, J. et al. (1998) Protein Sci 7, 1124-35) are also involved in interactions with hu5c8 mAb. In particular, the K143 side chain was observed to interact with the side chain of N103(H) of hu5c8 mAb as well as the main chain carbonyl of S95(L) of hu5c8 mAb. Y146 was observed to interact with the S32(L) of the hu5c8 mAb. This interaction occurred at the bottom of the cleft formed between the heavy and light chain and appeared to be the most prominent feature of the antigen-antibody



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interaction. The overall structure of CD154 was very similar to that of the uncomplexed CD154. Thus, the neutralizing effect of the hu5c8 mAb appears to be a consequence of steric blocking of CD154-CD40 interactions and not of any antibody-induced conformational changes. The solvent accessible surface buried upon complexation of CD154 with CD40 has been predicted to be in the range of 834 to 1123 Å<sup>2</sup> (Bajorath, J. et al. (1995), Biochemistry 34, 9884-92 and Singh, J. et al. (1998) Protein Sci 7, 1124-35). This is larger than the surface area of 765 Å<sup>2</sup> buried in the CD154-hu5c8 Fab complex. The epitope is a relatively flat region of the surface of CD154.

Significant electron density was observed for the biantennary complex-type carbohydrate attached to residue N240 of CD154. The carbohydrate chain was accommodated within a large solvent channel of the crystal lattice, about 100 Å wide. The electron density of the carbohydrate was not of sufficient quality to allow model building of the its residues, presumably due to disorder. However, it was apparent that the carbohydrate forms extensive non-covalent interactions with the heavy chain of the hu5c8 mAb. Residues of the antibody that were observed to interact within contact distance include Q43(H), E62(H), K63(H) and S66(H). These contacts may contribute to the energy of the interaction of hu5c8 mAb with CD154. CD154 mutant N240Q, which lacks a carbohydrate, exhibited a reduced level of immunoprecipitation with hu5c8 mAb (**Table 2**). However the level of expression of the mutant is lower than wild-type (WT) which makes it difficult to ascertain whether or not the loss of the carbohydrate has a negative effect on hu5c8 mAb

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binding. Additionally, the electron density map revealed that the carbohydrate interacts with R207 of CD154, a residue that has an important contribution to the positive electrostatic potential in its immediate  
5 region of CD154 molecule (Singh, J. et al. (1998), Protein Sci 7, 1124-35).

A zinc ion was found to be located near the binding site. It was coordinated by D100(H), D106(H) and E59(L) and there were no direct contacts of the ion  
10 to CD154. This ion is unlikely to play a functional role and its presence is probably a crystallization artifact.

In summary, the crystal structure of CD154 in complex with the humanized 5c8 mAb Fab according to  
15 this invention constitutes the first available structure of a TNF family member in complex with a neutralizing antibody Fab fragment. The structure showed that the antibody inhibits CD154 function by sterically blocking the binding site of CD40 receptor.  
20 The possibility that antibody binding may prevent conformational changes of CD154, which may be necessary for CD40 binding, can not be discounted. However, comparison of available TNF ligand structures and their complexes with receptors does not show evidence of  
25 significant conformational changes, upon receptor binding, that are distant from the binding site (Banner, K.H. et al. (1996), Br J Pharmacol 119, 1255-61 and Hymowitz, S.G. et al. (1999), Mol Cell 4, 563-71).

30 The epitope of the antibody was located just above a cluster of hydrophobic core residues whose mutation has been associated with HIGMS. It has been proposed that these mutations may cause structural

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perturbations of a region of the surface that is important for receptor binding (Karpusas, M. et al. (1995), Structure 3, 1426). It is interesting that the CD154 antigenic epitope for hu5c8 mAb coincides with  
5 the region of the surface that is most likely to be perturbed by the mutations.

**EXAMPLE 2                    ASSESSMENT OF THE NATURE OF THE 5c8  
MONOCLONAL ANTIBODY AND CD154 INTERFACE  
BY EXAMINING THE ABILITY OF SITE-  
10 DIRECTED MUTANTS OF CD154 TO BIND TO  
hu5c8 MAB AND CD40**

The location and nature of the CD154 antigenic epitope of 5c8 mAb was studied by site-directed mutagenesis of human CD154. Mutation  
15 sites selected included surface residues in the vicinity of the putative CD40 binding site, residues of the interface of two CD154 monomers as well as residues involved in mutations associated with Hyper-IgM syndrome (HIGMS). Residue substitutions included  
20 changes to alanine, charge-reversal mutations or changes to other residues.

Construction and expression of CD154 mutants has been described previously (Singh, J. et al. (1998), Protein Sci 7, 1124-35, the disclosure of which is  
25 hereby incorporated by reference). Briefly, mutants of human CD154 were made by unique site elimination mutagenesis using a Pharmacia kit (Pharmacia, N.J.). COS cells were transfected with an expression vector containing the mutant gene and an SV40 origin site for  
30 amplification. Transfected cells were metabolically labeled and harvested. Cell lysates were pre-cleared with protein A sepharose beads and anti-CD154 monoclonal antibodies. Immune complexes collected on

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beads were washed and subjected to SDS electrophoresis. Immunoprecipitation of each mutant human CD154 protein was compared to that of wild-type human CD154 protein.

5 Mutated full-length CD154 was transiently expressed in its full-length membrane-bound form. Expression of mutant CD154s was confirmed with immunoprecipitation of detergent extracts from metabolically labeled cells with polyclonal antibodies directed against synthetic peptides from the N and  
10 C-termini of CD154 (Singh, J. et al. (1998), Protein Sci 7, 1124-35 and Garber, E. et al. (1999), J Biol Chem 274, 33545-50). 5c8 mAb binding to CD154 mutants was assessed by assaying the ability of CD154 mutants from detergent extracts to be immunoprecipitated by 5c8  
15 mAb. Similarly, CD40 binding to CD154 mutants was assessed by immunoprecipitation with CD40-Fc. CD40-Fc is a fusion protein of the extracellular domain of CD40 and a human IgG Fc fragment (Hsu et al. (1997) J. Biol. Chem., 272: 911-915, the disclosure of which is hereby  
20 incorporated by reference). **Table 2** summarizes data for 23 single residue mutations of human CD154.

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Table 2: Summary of mutagenesis data\*

	<u>Mutation</u>	<u>5c8 mAb</u>	<u>CD40-Fc</u>	<u>Type</u>
	A123E	-	-	HIGMS
	V126A	-	-	HIGMS
5	S128R	-	-	HIGMS (S128R/E129G)
	E129G	-	-	HIGMS (S128R/E129G)
	K133A	+	+	surface charge
	W140G	-	-	HIGMS
	E142K	+	+	murine residue
10	K143A	+/-	+/-	surface charge
	G144E	+	-	HIGMS
	Y145A	+/-	-	surface residue
	L155P	-	-	HIGMS
	Y170C	-	-	HIGMS
15	R203A	+	+/-	surface charge
	I204A	+	+	monomer interface
	R207A	+	+/-	surface charge
	T211D	+	+	HIGMS
	G227V	-	-	HIGMS
20	A235P	-	-	HIGMS
	H249A	-	-	surface charge
	T251A	+	+	monomer interface
	T254M	-	-	HIGMS
	F253A	-	-	monomer interface
25	G257S	-	-	HIGMS
	K216	+		

(\*) "+, +/-, -" symbols indicate immunoprecipitation levels in comparison to WT: "+" comparable signal ;  
 "+/-" reduced but detectable signal; "-" undetectable  
 30 signal.

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The effects for some of these mutations were previously described in the context of the crystal structure of CD154 and homology model of CD40 (Singh, J. et al. (1998), Protein Sci 7, 1124-35 and Garber, E. et al. (1999), J Biol Chem 274, 33545-50). Here, the effects of these and additional mutations on 5c8 mAb binding were interpreted in the context of the crystal structure of CD154-5c8 mAb Fab.

Mutation of surface residues of CD154 had an effect on immunoprecipitation that, in general, correlated with the location of the antigenic epitope of 5c8 mAb as determined from the crystal structure (**Table 2 and Figure 11**). The complete loss of immunoprecipitation due to mutation H249A suggests that surface residue H249 may play important role in the energetics of the CD154-5c8 mAb interaction. This conclusion relies on the observation that the CD154-hu5c8 mAb Fab interaction surface in the co-crystal structure described in **Example 1** (as well as the CD154-CD40 interaction surface) was very extensive and therefore the loss of single residue side chains in most cases is not likely to result in complete loss of the interaction between CD154 and 5c8 mAb. The crystal structure showed that residue H249 lies in the middle of the epitope and interacts with Y33(H) of 5c8 mAb (**Example 1**). Mutation of residue E129 to glycine also resulted in complete loss of immunoprecipitation. This residue was observed to interact with N103(H) of hu5c8 mAb Fab and its substitution with glycine resulted in loss of this interaction. As discussed further below, mutation E129G also resulted in structural perturbations that may contribute to the loss of immunoprecipitation. The substitution of other surface

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residues, such as K143, had a more intermediate effect. Of interest is surface residue Y145, which was not observed to form direct interactions with 5c8 mAb. However, mutation Y145A had a intermediate effect on  
5 immunoprecipitation with 5c8 mAb. The OH group of the side chain of Y145 was shown to interact with the carbonyl oxygen of E230 of the adjacent CD154 monomer in the co-crystal structure described in **Example 1**. This suggests that the residue may also play a  
10 structure-stabilizing role that could explain the observed effect in immunoprecipitation.

Most of the HIGMS mutations resulted in complete loss of ability of CD154 to be immunoprecipitated by 5c8 mAb (Garber, E. et al. (1999)  
15 J Biol Chem 274, 33545-50 and Bajorath, J., et al. (1995), Biochemistry 34, 1833-44). Inspection of the co-crystal structure showed that most of the HIGMS mutations involve residues that are not directly involved in 5c8 mAb interactions and are more likely to  
20 play a structural role. For example, residues A123, V126, W140, L155, Y170, A235, T254, G257 are buried residues and are likely to be important for protein folding and stability. Consistent with that view, all Hyper-IgM mutations that affected 5c8 mAb binding also  
25 affected CD40-Fc binding. It appears that most HIGMS mutations affect the structure locally, since it has been shown that these mutations do not cause an alteration in structure that is sufficient to completely prevent homotrimerization (Garber, E. et al.  
30 (1999) J Biol Chem 274, 33545-50). Interestingly, most of the residues involved in known HIGMS mutations form a cluster buried underneath the surface area of the 5c8 mAb epitope on CD154 (**Figure 11**). This fact makes it

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more likely that the structural perturbations induced by the mutations propagate to the surface area of the epitope and result in loss of 5c8 mAb binding.

HIGMS double mutation S128R/E129G and single  
5 mutation T211D are the only HIGMS mutations that involve essentially exposed surface residues. To dissect the contribution of each mutated residue of HIGMS mutation S128R/E129G, single mutants S128R and E129G were generated in addition to the double mutant  
10 protein. The double mutation S128R/E129G and the single mutations S128R and E129G resulted in complete loss of 5c8 mAb and CD40-Fc binding (**Table 2**). Inspection of the crystal structure showed that residue S128 does not interact at all with 5c8 mAb, however it  
15 stabilizes essential residue H249 which interacts with Y33(H) of 5c8 mAb. Its substitution with arginine may disrupt this interaction and the introduction of the positive charge may alter the local electrostatic potential. The other residue involved in the mutation,  
20 E129, was observed to interact with N103(H) of 5c8 mAb and also stabilizes the conformation of K143 of CD154 which interacts with N103(H) of 5c8 mAb (**Figures 10 and 11**). Its substitution with glycine resulted in loss of these interactions. Previous studies have also shown  
25 that while mutant E129G binds weakly to CD40-Fc, mutant E129A binds like wild-type to CD40-Fc (Bajorath, J., et al.(1995), Biochemistry 34, 1833-44). This suggested that the substitution to glycine introduces additional flexibility to the loop and may perturb the structure  
30 of CD154. Thus the effect of the E129G mutation on 5c8 mAb binding is a combination of loss of interactions and local perturbation of the structure which may result in loss of additional interactions. T211D



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mutant behaved like wild-type in terms of 5c8 mAb and CD40-Fc binding and it has been concluded that the mutation is a result of polymorphism of the CD154 gene (Garber, E. et al. (1999) J Biol Chem 274, 33545-50).

- 5 This residue is surface-exposed and lies near the top of the pyramid, away from the epitope (**Figure 11**). Previous crystallographic analysis has confirmed that the T211D mutant protein folds like wild-type (Garber, E. et al. (1999) J Biol Chem 274, 33545-50).

10 Equivalents

- The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The foregoing embodiments are therefore to be considered in all  
15 respects illustrative of, rather than limiting on, the invention disclosed herein. All changes which come within the meaning and range of equivalency of the claims are intended to be embraced therein.

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CLAIMS

We claim:

1. A crystallizable composition comprising a CD154 polypeptide complexed with an anti-  
5 CD154 antibody or an antigen binding fragment of said antibody.
2. The crystallizable composition according to claim 1, wherein said anti-CD154 antibody is a monoclonal antibody.
- 10 3. The crystallizable composition according to claim 1, wherein said CD154 polypeptide is a polypeptide comprising the extra-cellular domain of CD154.
4. The crystallizable composition  
15 according to claim 1, wherein said CD154 polypeptide comprises a polypeptide consisting of amino acid 116 to amino acid 261 of CD154.
5. The crystallizable composition according to claim 1, wherein said anti-CD154 antibody  
20 is a monoclonal antibody which specifically binds the 5c8 antigen, which is specifically bound by monoclonal antibody 5c8 (produced by the hybridoma having ATCC Accession No. HB 10916).
- 25 6. The crystallizable composition according to claim 1, wherein said fragment is a Fab fragment.

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7. The crystallizable composition according to claim 6, wherein said Fab fragment is a Fab fragment of monoclonal antibody 5c8 (produced by the hybridoma having ATCC Accession No. HB 10916), or  
5 of humanized 5c8 mAb.

8. A crystallizable composition comprising a trimer of CD154 polypeptides and three anti-CD154 monoclonal antibodies, or antigen binding fragments thereof, wherein each of said polypeptides  
10 comprises the extra-cellular domain of CD154.

9. A crystal comprising a CD154 polypeptide complexed with an anti-CD154 antibody, or an antigen binding fragment thereof.

15 10. The crystal according to claim 9, wherein said CD154 polypeptide comprises the extra-cellular domain of CD154 polypeptide.

11. The crystal according to claim 9, wherein said CD154 polypeptide comprises a polypeptide  
20 consisting of amino acid 116 to amino acid 261 of CD154.

12. The crystal according to claim 9, wherein said anti-CD154 antibody is a monoclonal antibody.

25 13. The crystal according to claim 9, wherein said anti-CD154 antibody is a monoclonal antibody which specifically binds the 5c8 antigen, which is specifically bound by monoclonal antibody 5c8

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(produced by the hybridoma having ATCC Accession No. HB 10916).

14. The crystal according to claim 9, wherein said fragment is a Fab fragment.

5           15. The crystal according to claim 14, wherein said Fab fragment is a Fab fragment of monoclonal antibody 5c8 (produced by the hybridoma having ATCC Accession No. HB 10916) or of humanized 5c8 monoclonal antibody.

10           16. A crystal comprising a trimer of CD154 polypeptides and three anti-CD154 antibodies, or antigen binding fragments thereof, wherein each of said polypeptides comprises the extra-cellular domain of CD154.

15           17. A computer for producing a three-dimensional representation of:

a) a molecular complex comprising a first binding site defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4; or

20           b) a homologue of said molecular complex, wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å;

25           wherein said computer comprises:

(i) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises the

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structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4; and

- 5 (ii) instructions for processing said machine-readable data into said three-dimensional representation.

18. The computer for producing a three-dimensional representation according to claim 17,  
10 wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 1.00Å.

19. The computer for producing a three-dimensional representation according to claim 17,  
15 wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 0.50Å.

20. The computer according to any one of claims 17-19, wherein said first binding site is a  
20 binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

21. The computer according to any one of  
25 claims 17-19, wherein said second binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

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22. A computer for producing a three-dimensional representation of:

- a) a molecular complex comprising a first binding site, defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, that associates with one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or
- b) a homologue of said molecular complex, wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said CD154 amino acids and said one or more anti-CD154 amino acids between 0.00Å and 1.50Å; wherein said computer comprises:
- (i) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises the structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4 and the structure coordinates of one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; and

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(ii) instructions for processing said machine-readable data into said three-dimensional representation.

23. The computer for producing a three-  
5 dimensional representation according to claim 22,  
wherein said homologue comprises a second binding site  
that has a root mean square deviation from the backbone  
atoms of said CD154 amino acids of between .0.00Å and  
1.00Å.

10 24. The computer for producing a three-  
dimensional representation according to claim 22,  
wherein said homologue comprises a second binding site  
that has a root mean square deviation from the backbone  
atoms of said CD154 amino acids of between 0.00Å and  
15 0.50Å.

25. The computer according to any one of  
claims 22-24, wherein said first binding site is a  
binding site for 5c8 mAb (produced by the hybridoma  
having ATCC Accession No. HB 10916), or an antigen  
20 binding fragment thereof, or humanized 5c8 mAb, or an  
antigen binding fragment thereof.

26. The computer according to any one of  
claims 22-24, wherein said second binding site is a  
binding site for 5c8 mAb (produced by the hybridoma  
25 having ATCC Accession No. HB 10916), or an antigen  
binding fragment thereof, or humanized 5c8 mAb, or an  
antigen binding fragment thereof.

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27. A computer for producing a three-dimensional representation of:

a) a molecular complex defined by structure coordinates of one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or

b) a homologue of said molecular complex, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å; wherein said computer comprises:

(i) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises the structure coordinates of anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; and

(ii) instructions for processing said machine-readable data into said three-dimensional representation.

28. The computer for producing a three-dimensional representation according to claim 27, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 1.00Å.

29. The computer for producing a three-dimensional representation according to claim 27,



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wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 0.50Å.

30. A computer for producing a three-  
5 dimensional representation of:

- a) a molecular complex defined by at least a portion of the structure coordinates of all the CD154 and anti-CD154 antibody amino acids set forth in Figure 4, or
- 10 b) a homologue of said molecular complex, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å than 1.50Å; and wherein said computer comprises:
  - 15 (i) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises at least a portion of the structure coordinates of all of the CD154 and anti-CD154 antibody amino acids set forth
  - 20 in Figure 4; and
  - (ii) instructions for processing said machine-readable data into said three-dimensional representation.

31. The computer for producing a three-  
25 dimensional representation according to claim 30, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 1.00Å.

32. The computer for producing a three-  
30 dimensional representation according to claim 30,

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wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 0.50Å.

33. A computer for determining at least a  
5 portion of the structure coordinates corresponding to X-ray diffraction data obtained from a molecular complex, wherein said computer comprises:

a) a machine-readable data storage medium comprising a data storage material encoded with  
10 machine-readable data, wherein said data comprises at least a portion of the structure coordinates of CD154 or anti-CD154 antibody according to Figure 4;

b) a machine-readable data storage medium comprising a data storage material encoded with  
15 machine-readable data, wherein said data comprises X-ray diffraction data obtained from said molecular complex; and

c) instructions for performing a Fourier transform of the machine readable data of (a) and for  
20 processing said machine readable data of (b) into structure coordinates.

34. The computer according to any one of claims 17-19, 22-24 or 27-33, further comprising a display for displaying said structure coordinates.

25 35. The computer according to claim 20, further comprising a display for displaying said structure coordinates.

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36. The computer according to claim 21, further comprising a display for displaying said structure coordinates.

37. The computer according to claim 25,  
5 further comprising a display for displaying said structure coordinates.

38. The computer according to claim 26, further comprising a display for displaying said structure coordinates.

10 39. A method for evaluating the potential of a chemical entity to associate with:  
a) a molecular complex comprising a first binding site defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143,  
15 Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4; or  
b) a homologue of said molecular complex, wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone  
20 atoms of said amino acids between 0.00Å and 1.50Å; comprising the steps of:  
(i) employing computational means to perform a fitting operation between the chemical entity and said first binding site of the molecular complex or  
25 said second binding site of said homologue of said molecular complex; and  
(ii) analyzing the results of said fitting operation to quantify the association between the chemical entity and said first binding site or said  
30 second binding site.

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40. The method according to claim 39, wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 1.00Å.

5 41. The method according to claim 39, wherein said homologue has a second binding site that has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 0.50Å.

42. The method according to any one of  
10 claims 39-41, wherein said first binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

15 43. The method according to any one of claims 39-41, wherein said second binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an  
20 antigen binding fragment thereof.

44. A method for evaluating the potential of a chemical entity to associate with:

a) a molecular complex comprising a first binding site, defined by structure coordinates of CD154  
25 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, that associates with one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59,

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Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or

b) a homologue of said molecular complex,  
5 wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and 1.50Å;

comprising the steps of:

10 (i) employing computational means to perform a fitting operation between the chemical entity and said first binding site or said second binding site; and

(ii) analyzing the results of said  
15 fitting operation to quantify the association between the chemical entity and said first binding site or said second binding site.

45. The method according to claim 44,  
wherein said homologue comprises a second binding site  
20 that has a root mean square deviation from the backbone atoms of said CD154 amino acids of between 0.00Å and 1.00Å.

46. The method according to claim 44,  
wherein said homologue comprises a second binding site  
25 that has a root mean square deviation from the backbone atoms of said CD154 amino acids of between 0.00Å and 0.50Å.

47. The method according to any one of  
claims 44-46, wherein said first binding site is a  
30 binding site for 5c8 mAb (produced by the hybridoma

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having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

48. The method according to any one of  
5 claims 44-46, wherein said second binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

10 49. A method for evaluating the potential of a chemical entity to associate with:

a) a molecular complex defined by at least a portion of the structure coordinates of all the CD154 and anti-CD154 antibody amino acids, as set forth  
15 in Figure 4; or

b) a homologue of said molecular complex having a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å;

20 comprising the steps of:

(i) employing computational means to perform a fitting operation between the chemical entity and a first binding site of said molecular complex or a second binding site of said homologue of said molecular  
25 complex; and

(ii) analyzing the results of said fitting operation to quantify the association between the chemical entity and said first binding site or said second binding site.

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50. The method according to claim 49, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.00Å.

5 51. The method according to claim 49, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 0.50Å.

52. The method according to any one of  
10 claims 49-51, wherein said first binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

15 53. The method according to any one of claims 49-51, wherein said second binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an  
20 antigen binding fragment thereof.

54. A chemical entity identified by the method according to any one of claims 39-53.

55. A compound assembled from one or more chemical entities according to claim 54.

25 56. A method for identifying a potential agonist or antagonist of CD154 comprising the steps of:

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a) using the structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4 ± a  
5 root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å, to generate a three-dimensional structure of a molecular complex comprising a binding site;

b) employing said three-dimensional  
10 structure to design or select said potential agonist or antagonist;

c) synthesizing said potential agonist or antagonist; and

d) contacting said potential agonist or  
15 antagonist with CD154 to determine the ability of said potential agonist or antagonist to bind to CD154.

57. The method according to claim 56, wherein said root mean square deviation from the backbone atoms of said amino acids is between 0.00Å and  
20 1.00Å.

58. The method according to claim 56, wherein said root mean square deviation from the backbone atoms of said amino acids is between 0.00Å and 0.50Å.

25 59. The method according to any one of claims 56-58, wherein said binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding  
30 fragment thereof.



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60. A method for identifying a potential agonist or antagonist of CD154 comprising the steps of:

- a) using the structure coordinates of  
5 CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, wherein said CD154 amino acids associate with one or more anti-CD154 antibody amino acids Ser31, Tyr32,  
10 Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4  $\pm$  a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and  
15 1.50Å, to generate a three-dimensional structure of a molecular complex comprising a binding site;
- b) employing said three-dimensional structure to design or select said potential agonist or antagonist;
- 20 c) synthesizing said potential agonist or antagonist; and
- d) contacting said potential agonist or antagonist with CD154 to determine the ability of said potential agonist or antagonist to bind to CD154.

25 61. The method according to claim 60, wherein said root mean square deviation from the backbone atoms of said CD154 amino acids is between 0.00Å and 1.00Å.

30 62. The method according to claim 60, wherein said root mean square deviation from the

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backbone atoms of said CD154 amino acids is between 0.00Å and 0.50Å.

63. The method according to any one of claims 60-62, wherein said binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or a variant of an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

64. A method for identifying a potential agonist or antagonist of CD154 comprising the steps of:

- a) using at least a portion of the structure coordinates of all the amino acids of CD154 and anti-CD154 antibody according to Figure 4  $\pm$  a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and 1.50Å, to generate a three-dimensional structure of a molecular complex comprising a binding site;
- b) employing said three-dimensional structure to design or select said potential agonist or antagonist;
- c) synthesizing said potential agonist or antagonist; and
- d) contacting said potential agonist or antagonist with CD154 to determine the ability of said potential agonist or antagonist to bind to CD154.

65. The method according to claim 64, wherein said root mean square deviation from the backbone atoms of said amino acids is between 0.00Å and 1.00Å.

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66. The method according to claim 64, wherein said root mean square deviation from the backbone atoms of said amino acids is between 0.00Å and 0.50Å.

5 67. The method according to any one of claims 64-66, wherein said binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or a variant of an antigen binding fragment thereof, or humanized 5c8 mAb, or an  
10 antigen binding fragment thereof.

68. The method according to any one of claims 56-58, 60-62 or 64-66, further comprising the step of:

15 (e) determining whether said potential antagonist interrupts CD40:CD154 interaction.

69. The method according to claim 59, further comprising the step of:

(e) determining whether said potential antagonist interrupts CD40:CD154 interaction.

20 70. The method according to claim 63, further comprising the step of:

(e) determining whether said potential antagonist interrupts CD40:CD154 interaction.

25 71. The method according to claim 67, further comprising the step of:

(e) determining whether said potential antagonist interrupts CD40:CD154 interaction.

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72. A potential agonist or antagonist of CD154 identified by the method according to any one of claims 57-71.

73. A method for evaluating the potential  
5 of a variant of monoclonal antibody 5c8, or a variant of an antigen binding fragment thereof, or a variant of humanized 5c8 mAb, or a variant of an antigen binding fragment thereof, to associate with:

a) a molecular complex comprising a first  
10 binding site defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143, Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4; or

b) a homologue of said molecular complex,  
15 wherein said homologue comprises a second binding site that has a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å; comprising the steps of:

(i) employing computational means to  
20 perform a fitting operation between the variant and said first binding site or said second binding site; and

(ii) analyzing the results of said  
fitting operation to quantify the association between  
25 the variant and said first binding site or said second binding site.

74. The method according to claim 73,  
wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids of between  
30 0.00Å and 1.00Å.

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75. The method according to claim 73, wherein said homologue has a root mean square deviation from the backbone atoms of said amino acids of between 0.00Å and 0.50Å.

5 76. The method according to any one of claims 73-75, wherein said first binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an  
10 antigen binding fragment thereof.

77. The method according to any one of claims 73-75, wherein said second binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen  
15 binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

78. A method for evaluating the potential of a variant of monoclonal antibody 5c8, or a variant of an antigen binding fragment thereof, or a variant of  
20 humanized 5c8 mAb, or a variant of an antigen binding fragment thereof, to associate with:

a) a molecular complex comprising a first binding site, defined by structure coordinates of CD154 amino acids Glu129, Ala130, Ser132, Glu142, Lys143,  
25 Gly144, Tyr146, Cys178, Cys218, Ser245, Gln246, Ser248, His249 and Gly250 according to Figure 4, that associates with one or more anti-CD154 antibody amino acids Ser31, Tyr32, Tyr33, Asn52, Ser54, Asp57, Asn59, Arg102, Asn103 of the heavy chain and amino acids

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Ser31, Ser32, Tyr36, Ser95 and Trp96 of the light chain according to Figure 4; or

b) a homologue of said molecular complex, wherein said homologue comprises a second binding site  
5 that has a root mean square deviation from the backbone atoms of said CD154 amino acids between 0.00Å and 1.50Å;

comprising the steps of:

(i) employing computational means to  
10 perform a fitting operation between the variant and said first binding site or said second binding site; and

(ii) analyzing the results of said fitting operation to quantify the association between  
15 the variant and said first binding site or said second binding site.

79. The method according to claim 78, wherein said homologue has a root mean square deviation from the backbone atoms of said CD154 amino acids of  
20 between 0.00Å and 1.00Å.

80. The method according to claim 78, wherein said homologue has a root mean square deviation from the backbone atoms of said CD154 amino acids of between 0.00Å and 0.50Å.

25 81. The method according to any one of claims 78-80, wherein said first binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an  
30 antigen binding fragment thereof.

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82. The method according to any one of claims 78-80, wherein said second binding site is a binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen  
5 binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

83. A method for evaluating the potential of a variant of monoclonal antibody 5c8, or a variant of an antigen binding fragment thereof, or a variant of  
10 humanized 5c8 mAb, or a variant of an antigen binding fragment thereof, to associate with:

a) a molecular complex defined by at least a portion of the structure coordinates of all the CD154 and anti-CD154 antibody amino acids, as set forth  
15 in Figure 4; or

b) a homologue of said molecular complex having a root mean square deviation from the backbone atoms of said amino acids between 0.00Å and 1.50Å;  
20 comprising the steps of:

(i) employing computational means to perform a fitting operation between the variant and a first binding site of the molecular complex or a second binding site of the homologue of the molecular complex;  
25 and

(ii) analyzing the results of said fitting operation to quantify the association between the variant and said first binding site or said second binding site.

84. The method according to claim 83,  
30 wherein said homologue has a root mean square deviation

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from the backbone atoms of said amino acids of between 0.00Å and 1.00Å.

85. The method according to claim 83, wherein said homologue has a root mean square deviation  
5 from the backbone atoms of said amino acids of between 0.00Å and 0.50Å.

86. The method according to any one of claims 83-85, wherein said first binding site is a binding site for 5c8 mAb (produced by the hybridoma  
10 having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

87. The method according to any one of claims 83-85, wherein said second binding site is a  
15 binding site for 5c8 mAb (produced by the hybridoma having ATCC Accession No. HB 10916), or an antigen binding fragment thereof, or humanized 5c8 mAb, or an antigen binding fragment thereof.

88. A variant of monoclonal antibody 5c8  
20 or a variant of humanized 5c8 mAb, or a variant of an antigen binding fragment thereof, identified by the method according to any one of claims 73-87.

89. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a  
25 variant of monoclonal antibody 5c8 or a variant humanized 5c8 mAb, or a variant of an antigen binding fragment thereof, according to claim 88, a potential agonist or antagonist of CD154 according to claim 72, a



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chemical entity according to claim 54 or a compound according to claim 55.

90. A method of treating a condition associated with inappropriate CD154 induced activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition according to claim 89 to the subject.

91. A method of attenuating severity of a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition according to claim 89 to the subject.

92. A method of suppressing effects of a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition according to claim 89 to the subject.

93. A method of preventing development of a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition according to claim 89 to the subject.

94. A method of delaying onset of a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition according to claim 89 to the subject.

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95. A method of inhibiting a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition  
5 according to claim 89 to the subject.

96. A method of reversing a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition  
10 according to claim 89 to the subject.

97. A method of treating a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition  
15 according to claim 89 to the subject.

98. A method of preventing a condition associated with inappropriate CD154 mediated activation in a subject, comprising the step of administering an effective amount of a pharmaceutical composition  
20 according to claim 89 to the subject.

99. The method according to any one of claims 88-98, wherein the subject is a primate.

100. The method according claim 99, wherein said primate is a human.

25 101. The method according to any one of claims 88-98, wherein the condition is an unwanted immune response.

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102. The method according to any one of claims 88-98, wherein the condition is an unwanted inflammatory response.

103. The method according to any one of  
5 claims 88-98, wherein the condition is an autoimmune disease.

104. The method according to any one of claims 88-98, wherein the condition is an allergy.

105. The method according to any one of  
10 claims 88-98, wherein the condition is an inhibitor response to a therapeutic agent.

106. The method according to any one of claims 88-98, wherein the condition is rejection of a donor organ.

107. The method according to any one of  
15 claims 88-98, wherein the condition is a B cell cancer.

108. The method according to any one of claims 88-98, wherein the condition is selected from the group consisting of: systemic lupus erythematosus,  
20 lupus nephritis, lupus neuritis, asthma, chronic obstructive pulmonary disease, bronchitis, emphysema, multiple sclerosis, uveitis, Alzheimer's disease, traumatic spinal cord injury, stroke, atherosclerosis, coronary restenosis, ischemic congestive heart failure,  
25 cirrhosis, hepatitis C, diabetic nephropathy, glomerulonephritis, osteoarthritis, rheumatoid arthritis, psoriasis, atopic dermatitis, systemic

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sclerosis, radiation-induced fibrosis, Crohn's disease, ulcerative colitis, multiple myeloma and cachexia.

109. A computer for determining at least a portion of the structure coordinates corresponding to an X-ray diffraction pattern of a molecular complex, wherein said computer comprises:
- a) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises at least a portion of the structure coordinates according to Figure 4;
  - b) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said data comprises an X-ray diffraction pattern of said molecular complex;
  - c) a working memory for storing instructions for processing said machine-readable data of a) and b);
  - d) a central processing unit coupled to said working memory and to said machine-readable data of a) and b) for performing a Fourier transform of the machine readable data of (a) and for processing said machine readable data of (b) into structure coordinates; and
  - e) a display coupled to said central processing unit for displaying said structure coordinates of said molecular complex.

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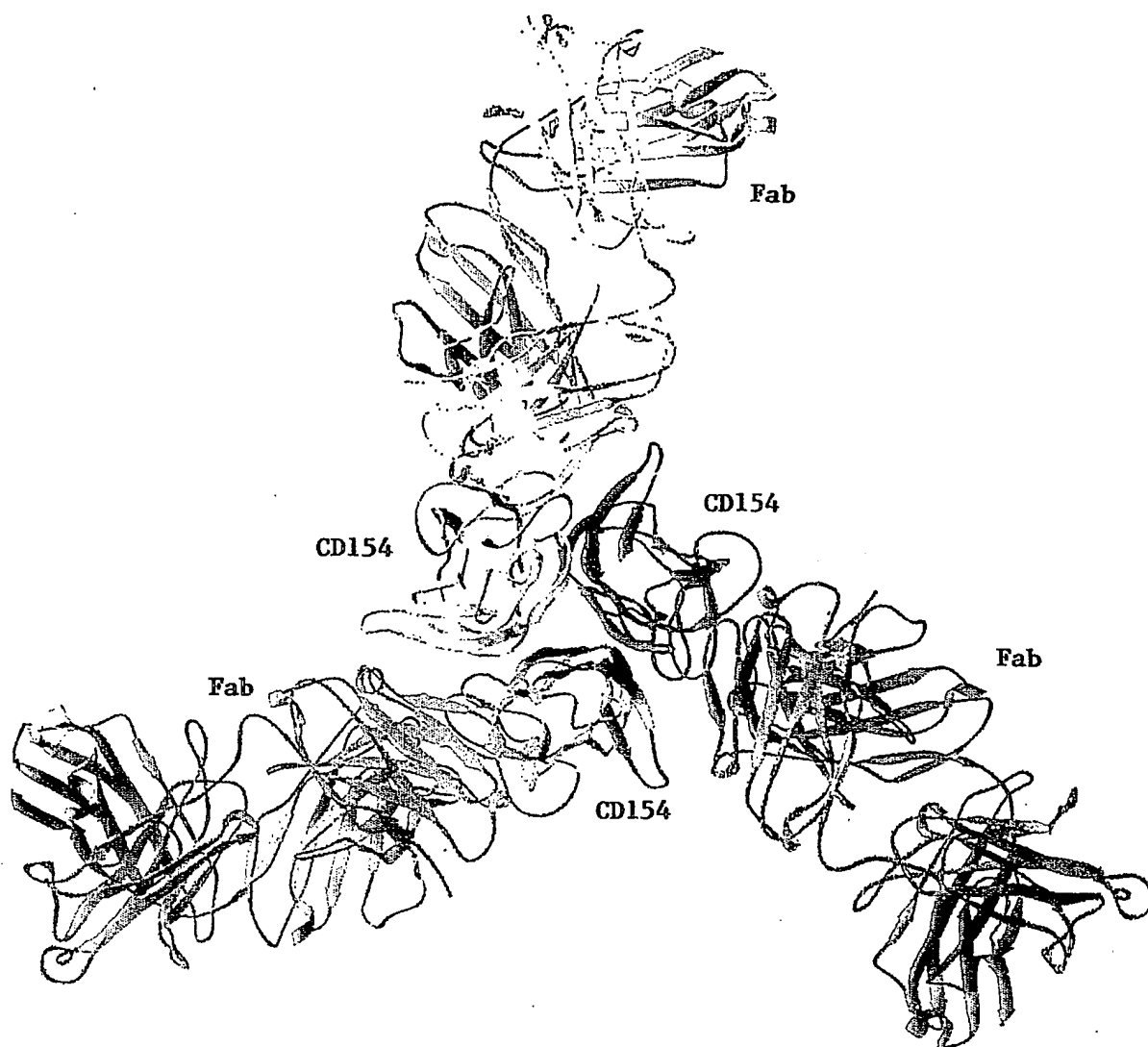


Figure 1

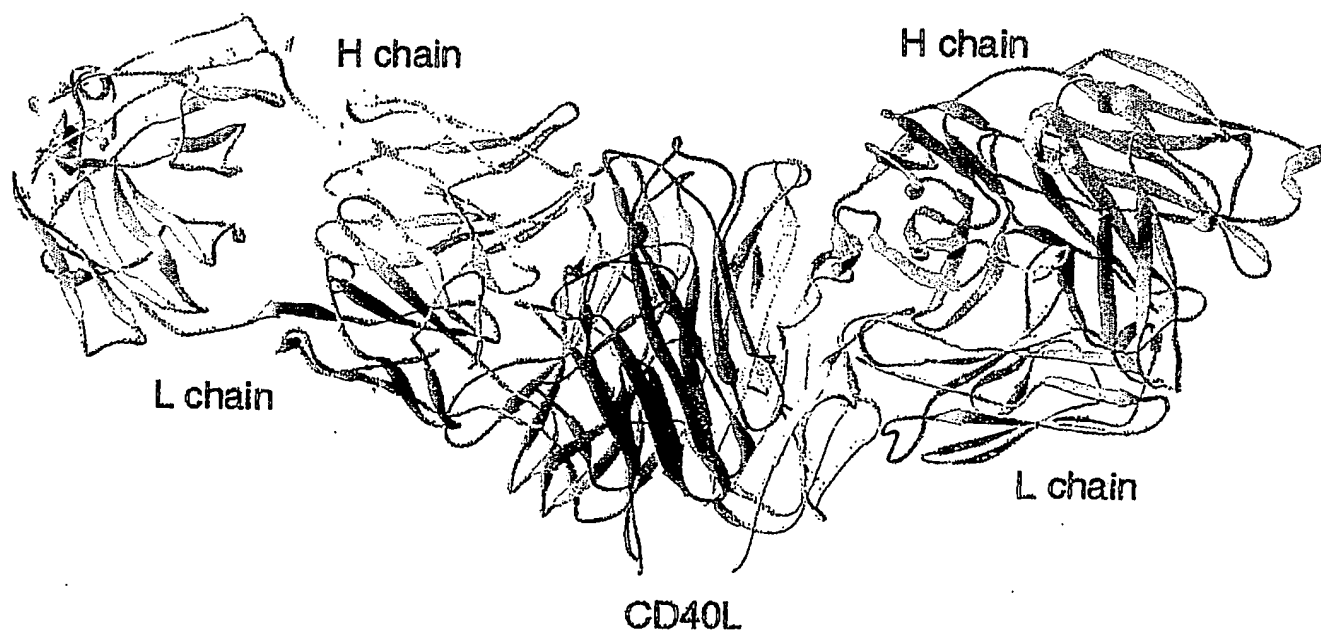


Figure 2

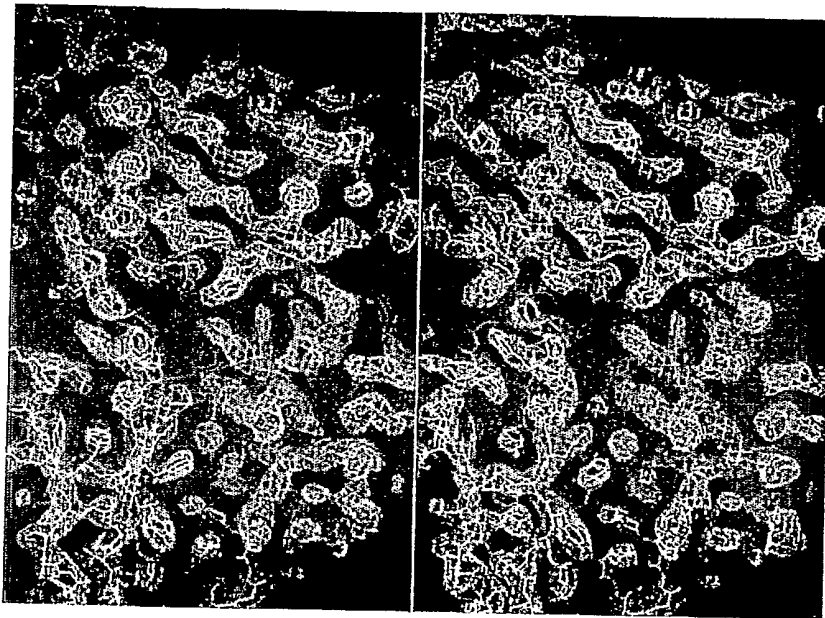


Figure 3

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FIG. 4

REMARK 1 COMPLEX OF CD40L EXTRACELLULAR DOMAIN AND 5C8 FAB FRAGMENT

ATOM	1	N	ASN A 119	69.488	3.245	-10.667	0.00	34.90
ATOM	2	CA	ASN A 119	69.765	4.685	-10.935	0.00	33.44
ATOM	3	C	ASN A 119	69.139	5.608	-9.885	0.00	27.98
ATOM	4	O	ASN A 119	69.816	6.476	-9.338	0.00	29.05
ATOM	5	CB	ASN A 119	69.258	5.070	-12.327	0.00	40.49
ATOM	6	CG	ASN A 119	70.217	5.985	-13.065	0.00	45.80
ATOM	7	OD1	ASN A 119	70.032	7.202	-13.096	0.00	49.45
ATOM	8	ND2	ASN A 119	71.248	5.402	-13.665	0.00	49.45
ATOM	9	N	PRO A 120	67.842	5.424	-9.578	1.00	20.78
ATOM	10	CA	PRO A 120	67.184	6.294	-8.570	1.00	13.48
ATOM	11	C	PRO A 120	67.510	5.778	-7.192	1.00	7.53
ATOM	12	O	PRO A 120	67.191	4.656	-6.829	1.00	7.43
ATOM	13	CB	PRO A 120	65.694	6.190	-8.892	1.00	5.31
ATOM	14	CG	PRO A 120	65.571	4.777	-9.425	1.00	16.14
ATOM	15	CD	PRO A 120	66.929	4.391	-10.092	1.00	20.53
ATOM	16	N	GLN A 121	68.211	6.558	-6.419	1.00	5.82
ATOM	17	CA	GLN A 121	68.525	6.046	-5.111	1.00	14.73
ATOM	18	C	GLN A 121	67.345	6.253	-4.177	1.00	14.85
ATOM	19	O	GLN A 121	66.754	7.330	-4.164	1.00	20.54
ATOM	20	CB	GLN A 121	69.759	6.756	-4.601	1.00	22.52
ATOM	21	CG	GLN A 121	70.753	7.016	-5.703	1.00	32.45
ATOM	22	CD	GLN A 121	72.056	6.319	-5.433	1.00	40.69
ATOM	23	OE1	GLN A 121	72.108	5.088	-5.336	1.00	42.74
ATOM	24	NE2	GLN A 121	73.128	7.102	-5.295	1.00	48.99
ATOM	25	N	ILE A 122	66.999	5.227	-3.408	1.00	11.87
ATOM	26	CA	ILE A 122	65.879	5.327	-2.487	1.00	3.09
ATOM	27	C	ILE A 122	66.441	5.191	-1.111	1.00	2.00
ATOM	28	O	ILE A 122	66.917	4.124	-0.702	1.00	2.83
ATOM	29	CB	ILE A 122	64.873	4.201	-2.711	1.00	2.00
ATOM	30	CG1	ILE A 122	63.996	4.502	-3.913	1.00	2.00
ATOM	31	CG2	ILE A 122	63.979	4.076	-1.590	1.00	6.81
ATOM	32	CD1	ILE A 122	64.178	3.461	-5.031	1.00	2.00
ATOM	33	N	ALA A 123	66.355	6.274	-0.373	1.00	2.00
ATOM	34	CA	ALA A 123	66.854	6.275	0.977	1.00	4.71
ATOM	35	C	ALA A 123	66.032	7.233	1.840	1.00	9.72
ATOM	36	O	ALA A 123	65.323	8.117	1.327	1.00	7.02
ATOM	37	CB	ALA A 123	68.267	6.671	0.987	1.00	8.11
ATOM	38	N	ALA A 124	66.119	7.076	3.159	1.00	10.35
ATOM	39	CA	ALA A 124	65.346	7.955	4.020	1.00	6.45
ATOM	40	C	ALA A 124	65.851	8.014	5.438	1.00	6.53
ATOM	41	O	ALA A 124	65.976	6.988	6.109	1.00	10.73
ATOM	42	CB	ALA A 124	63.943	7.526	4.027	1.00	2.56
ATOM	43	N	HIS A 125	66.183	9.215	5.886	1.00	2.00
ATOM	44	CA	HIS A 125	66.616	9.394	7.260	1.00	5.07
ATOM	45	C	HIS A 125	65.669	10.432	7.789	1.00	6.96
ATOM	46	O	HIS A 125	65.574	11.529	7.228	1.00	2.00
ATOM	47	CB	HIS A 125	68.020	9.934	7.346	1.00	7.95
ATOM	48	CG	HIS A 125	68.584	9.907	8.721	1.00	2.00
ATOM	49	ND1	HIS A 125	68.990	8.740	9.322	1.00	2.00
ATOM	50	CD2	HIS A 125	68.813	10.888	9.615	1.00	2.00
ATOM	51	CE1	HIS A 125	69.441	9.002	10.531	1.00	2.00
ATOM	52	NE2	HIS A 125	69.344	10.298	10.737	1.00	2.00
ATOM	53	N	VAL A 126	64.962	10.065	8.863	1.00	9.81
ATOM	54	CA	VAL A 126	63.955	10.924	9.478	1.00	4.44
ATOM	55	C	VAL A 126	64.339	11.135	10.904	1.00	2.00
ATOM	56	O	VAL A 126	64.921	10.271	11.519	1.00	2.85
ATOM	57	CB	VAL A 126	62.535	10.256	9.421	1.00	3.72
ATOM	58	CG1	VAL A 126	62.054	10.130	7.957	1.00	2.00

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ATOM	59	CG2	VAL	A	126	62.586	8.836	10.011	1.00	2.00
ATOM	60	N	ILE	A	127	63.958	12.277	11.429	1.00	2.79
ATOM	61	CA	ILE	A	127	64.280	12.669	12.782	1.00	2.85
ATOM	62	C	ILE	A	127	63.218	12.356	13.821	1.00	4.56
ATOM	63	O	ILE	A	127	62.036	12.531	13.579	1.00	10.94
ATOM	64	CB	ILE	A	127	64.502	14.141	12.810	1.00	2.59
ATOM	65	CG1	ILE	A	127	65.786	14.475	12.059	1.00	5.48
ATOM	66	CG2	ILE	A	127	64.551	14.602	14.221	1.00	10.90
ATOM	67	CD1	ILE	A	127	66.017	13.640	10.816	1.00	2.00
ATOM	68	N	SER	A	128	63.643	11.960	15.012	1.00	6.40
ATOM	69	CA	SER	A	128	62.701	11.628	16.077	1.00	6.75
ATOM	70	C	SER	A	128	61.889	12.874	16.393	1.00	10.70
ATOM	71	O	SER	A	128	62.413	14.002	16.375	1.00	6.76
ATOM	72	CB	SER	A	128	63.429	11.221	17.346	1.00	5.00
ATOM	73	OG	SER	A	128	63.792	12.407	18.035	1.00	12.39
ATOM	74	N	GLU	A	129	60.623	12.628	16.750	1.00	20.00
ATOM	75	CA	GLU	A	129	59.619	13.657	17.099	1.00	19.55
ATOM	76	C	GLU	A	129	58.790	13.190	18.304	1.00	17.16
ATOM	77	O	GLU	A	129	58.176	12.095	18.268	1.00	16.10
ATOM	78	CB	GLU	A	129	58.678	13.905	15.923	1.00	19.41
ATOM	79	CG	GLU	A	129	57.835	15.134	16.108	1.00	19.83
ATOM	80	CD	GLU	A	129	58.370	16.349	15.319	1.00	23.85
ATOM	81	OE1	GLU	A	129	59.535	16.746	15.559	1.00	16.34
ATOM	82	OE2	GLU	A	129	57.626	16.915	14.467	1.00	26.13
ATOM	83	N	ALA	A	130	58.821	13.990	19.375	1.00	15.08
ATOM	84	CA	ALA	A	130	58.072	13.654	20.586	1.00	17.23
ATOM	85	C	ALA	A	130	56.609	13.802	20.269	1.00	20.56
ATOM	86	O	ALA	A	130	56.260	14.547	19.350	1.00	24.01
ATOM	87	CB	ALA	A	130	58.464	14.562	21.743	1.00	8.44
ATOM	88	N	SER	A	131	55.754	13.106	21.020	1.00	26.04
ATOM	89	CA	SER	A	131	54.314	13.182	20.761	1.00	31.30
ATOM	90	C	SER	A	131	53.409	12.789	21.930	1.00	31.90
ATOM	91	O	SER	A	131	53.612	11.755	22.547	1.00	31.48
ATOM	92	CB	SER	A	131	53.965	12.338	19.550	1.00	31.45
ATOM	93	OG	SER	A	131	53.090	11.304	19.946	1.00	39.93
ATOM	94	N	SER	A	132	52.404	13.630	22.195	1.00	38.18
ATOM	95	CA	SER	A	132	51.440	13.456	23.296	1.00	39.71
ATOM	96	C	SER	A	132	50.526	12.262	23.061	1.00	39.02
ATOM	97	O	SER	A	132	49.932	11.729	23.989	1.00	38.59
ATOM	98	CB	SER	A	132	50.581	14.720	23.463	1.00	37.68
ATOM	99	OG	SER	A	132	50.828	15.652	22.425	1.00	40.98
ATOM	100	N	LYS	A	133	50.411	11.855	21.806	1.00	40.36
ATOM	101	CA	LYS	A	133	49.580	10.725	21.435	1.00	42.89
ATOM	102	C	LYS	A	133	49.845	9.580	22.364	1.00	44.71
ATOM	103	O	LYS	A	133	50.755	9.644	23.197	1.00	41.64
ATOM	104	CB	LYS	A	133	49.894	10.290	20.008	1.00	46.70
ATOM	105	CG	LYS	A	133	48.848	10.698	18.959	1.00	54.07
ATOM	106	CD	LYS	A	133	48.141	12.020	19.290	1.00	57.74
ATOM	107	CE	LYS	A	133	46.892	11.796	20.150	1.00	62.86
ATOM	108	NZ	LYS	A	133	46.914	12.518	21.477	1.00	63.58
ATOM	109	N	THR	A	134	49.055	8.521	22.216	1.00	48.56
ATOM	110	CA	THR	A	134	49.241	7.362	23.070	1.00	50.83
ATOM	111	C	THR	A	134	49.555	6.107	22.286	1.00	49.58
ATOM	112	O	THR	A	134	48.651	5.459	21.736	1.00	50.35
ATOM	113	CB	THR	A	134	48.003	7.084	23.977	1.00	52.18
ATOM	114	OG1	THR	A	134	47.264	8.300	24.185	1.00	57.93
ATOM	115	CG2	THR	A	134	48.466	6.512	25.336	1.00	49.29
ATOM	116	N	THR	A	135	50.845	5.779	22.236	1.00	44.34
ATOM	117	CA	THR	A	135	51.294	4.583	21.557	1.00	37.12
ATOM	118	C	THR	A	135	52.667	4.346	22.058	1.00	37.63



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ATOM	119	O	THR A 135	53.264	5.221	22.684	1.00	40.72
ATOM	120	CB	THR A 135	51.452	4.784	20.089	1.00	30.75
ATOM	121	OG1	THR A 135	51.709	6.165	19.847	1.00	28.12
ATOM	122	CG2	THR A 135	50.229	4.326	19.353	1.00	30.52
ATOM	123	N	SER A 136	53.165	3.155	21.753	1.00	35.84
ATOM	124	CA	SER A 136	54.520	2.759	22.103	1.00	30.05
ATOM	125	C	SER A 136	55.312	2.901	20.772	1.00	23.88
ATOM	126	O	SER A 136	56.547	2.864	20.736	1.00	26.78
ATOM	127	CB	SER A 136	54.511	1.310	22.615	1.00	28.19
ATOM	128	OG	SER A 136	54.073	0.440	21.590	1.00	28.44
ATOM	129	N	VAL A 137	54.574	3.112	19.687	1.00	11.82
ATOM	130	CA	VAL A 137	55.159	3.260	18.368	1.00	4.54
ATOM	131	C	VAL A 137	55.637	4.694	18.254	1.00	4.40
ATOM	132	O	VAL A 137	54.810	5.583	18.359	1.00	2.00
ATOM	133	CB	VAL A 137	54.107	3.011	17.289	1.00	2.00
ATOM	134	CG1	VAL A 137	52.863	3.587	17.707	1.00	12.88
ATOM	135	CG2	VAL A 137	54.460	3.675	16.026	1.00	2.00
ATOM	136	N	LEU A 138	56.948	4.907	17.998	1.00	8.69
ATOM	137	CA	LEU A 138	57.549	6.252	17.892	1.00	7.65
ATOM	138	C	LEU A 138	57.225	7.000	16.609	1.00	10.85
ATOM	139	O	LEU A 138	56.936	6.408	15.542	1.00	13.65
ATOM	140	CB	LEU A 138	59.078	6.247	18.043	1.00	3.62
ATOM	141	CG	LEU A 138	59.802	5.358	19.065	1.00	13.94
ATOM	142	CD1	LEU A 138	61.267	5.236	18.640	1.00	18.01
ATOM	143	CD2	LEU A 138	59.759	5.947	20.487	1.00	4.81
ATOM	144	N	GLN A 139	57.193	8.320	16.776	1.00	12.94
ATOM	145	CA	GLN A 139	56.926	9.288	15.720	1.00	15.17
ATOM	146	C	GLN A 139	58.233	9.735	15.105	1.00	19.13
ATOM	147	O	GLN A 139	59.303	9.564	15.711	1.00	23.96
ATOM	148	CB	GLN A 139	56.247	10.524	16.286	1.00	20.42
ATOM	149	CG	GLN A 139	54.844	10.342	16.901	1.00	24.47
ATOM	150	CD	GLN A 139	53.771	10.268	15.854	1.00	27.41
ATOM	151	OE1	GLN A 139	53.530	11.228	15.104	1.00	20.97
ATOM	152	NE2	GLN A 139	53.121	9.110	15.777	1.00	32.62
ATOM	153	N	TRP A 140	58.144	10.335	13.918	1.00	17.50
ATOM	154	CA	TRP A 140	59.329	10.779	13.200	1.00	12.74
ATOM	155	C	TRP A 140	58.898	11.922	12.387	1.00	11.23
ATOM	156	O	TRP A 140	57.784	11.904	11.901	1.00	16.98
ATOM	157	CB	TRP A 140	59.826	9.694	12.243	1.00	6.47
ATOM	158	CG	TRP A 140	60.063	8.419	12.945	1.00	2.00
ATOM	159	CD1	TRP A 140	59.205	7.396	13.028	1.00	2.00
ATOM	160	CD2	TRP A 140	61.174	8.083	13.785	1.00	2.00
ATOM	161	NE1	TRP A 140	59.685	6.441	13.876	1.00	6.28
ATOM	162	CE2	TRP A 140	60.898	6.835	14.349	1.00	2.00
ATOM	163	CE3	TRP A 140	62.366	8.721	14.112	1.00	5.56
ATOM	164	CZ2	TRP A 140	61.774	6.193	15.233	1.00	2.00
ATOM	165	CZ3	TRP A 140	63.241	8.088	14.999	1.00	5.83
ATOM	166	CH2	TRP A 140	62.932	6.831	15.548	1.00	3.34
ATOM	167	N	ALA A 141	59.800	12.876	12.201	1.00	10.35
ATOM	168	CA	ALA A 141	59.553	14.070	11.404	1.00	10.29
ATOM	169	C	ALA A 141	60.566	14.227	10.261	1.00	9.85
ATOM	170	O	ALA A 141	61.729	13.869	10.399	1.00	13.40
ATOM	171	CB	ALA A 141	59.601	15.284	12.281	1.00	5.35
ATOM	172	N	GLU A 142	60.112	14.744	9.127	1.00	7.71
ATOM	173	CA	GLU A 142	60.968	14.992	7.971	1.00	2.00
ATOM	174	C	GLU A 142	61.485	16.422	8.123	1.00	2.00
ATOM	175	O	GLU A 142	61.182	17.298	7.318	1.00	2.00
ATOM	176	CB	GLU A 142	60.146	14.887	6.716	1.00	2.00
ATOM	177	CG	GLU A 142	60.826	14.275	5.589	1.00	5.29
ATOM	178	CD	GLU A 142	59.889	14.008	4.414	1.00	13.11

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ATOM	179	OE1	GLU	A	142	59.047	13.076	4.515	1.00	12.09
ATOM	180	OE2	GLU	A	142	60.016	14.735	3.386	1.00	17.66
ATOM	181	N	LYS	A	143	62.230	16.656	9.194	1.00	2.00
ATOM	182	CA	LYS	A	143	62.801	17.964	9.442	1.00	2.62
ATOM	183	C	LYS	A	143	64.324	17.904	9.687	1.00	8.24
ATOM	184	O	LYS	A	143	64.960	16.865	9.444	1.00	6.09
ATOM	185	CB	LYS	A	143	62.139	18.586	10.648	1.00	8.04
ATOM	186	CG	LYS	A	143	62.055	17.625	11.833	1.00	7.85
ATOM	187	CD	LYS	A	143	61.681	18.360	13.115	1.00	5.54
ATOM	188	CE	LYS	A	143	60.198	18.210	13.367	1.00	10.68
ATOM	189	NZ	LYS	A	143	59.640	19.187	14.321	1.00	11.90
ATOM	190	N	GLY	A	144	64.893	18.998	10.220	1.00	8.10
ATOM	191	CA	GLY	A	144	66.327	19.060	10.442	1.00	10.63
ATOM	192	C	GLY	A	144	67.104	18.468	9.260	1.00	15.68
ATOM	193	O	GLY	A	144	66.605	18.469	8.103	1.00	15.93
ATOM	194	N	TYR	A	145	68.317	17.951	9.540	1.00	15.89
ATOM	195	CA	TYR	A	145	69.190	17.349	8.505	1.00	11.52
ATOM	196	C	TYR	A	145	68.712	15.975	8.206	1.00	4.20
ATOM	197	O	TYR	A	145	69.303	15.010	8.640	1.00	3.42
ATOM	198	CB	TYR	A	145	70.651	17.264	8.979	1.00	15.89
ATOM	199	CG	TYR	A	145	71.627	17.234	7.813	1.00	18.89
ATOM	200	CD1	TYR	A	145	72.465	18.333	7.531	1.00	16.94
ATOM	201	CD2	TYR	A	145	71.610	16.157	6.908	1.00	21.92
ATOM	202	CE1	TYR	A	145	73.251	18.360	6.356	1.00	17.80
ATOM	203	CE2	TYR	A	145	72.384	16.168	5.735	1.00	23.20
ATOM	204	CZ	TYR	A	145	73.199	17.281	5.457	1.00	19.97
ATOM	205	OH	TYR	A	145	73.903	17.327	4.264	1.00	13.14
ATOM	206	N	TYR	A	146	67.622	15.879	7.483	1.00	2.00
ATOM	207	CA	TYR	A	146	67.071	14.574	7.236	1.00	4.79
ATOM	208	C	TYR	A	146	67.290	14.078	5.845	1.00	6.02
ATOM	209	O	TYR	A	146	67.986	14.687	5.065	1.00	9.61
ATOM	210	CB	TYR	A	146	65.584	14.615	7.506	1.00	3.67
ATOM	211	CG	TYR	A	146	64.804	15.260	6.372	1.00	3.37
ATOM	212	CD1	TYR	A	146	64.575	16.637	6.338	1.00	2.00
ATOM	213	CD2	TYR	A	146	64.266	14.482	5.361	1.00	2.00
ATOM	214	CE1	TYR	A	146	63.835	17.188	5.344	1.00	2.00
ATOM	215	CE2	TYR	A	146	63.540	15.027	4.386	1.00	2.00
ATOM	216	CZ	TYR	A	146	63.318	16.373	4.374	1.00	2.00
ATOM	217	OH	TYR	A	146	62.550	16.865	3.363	1.00	4.78
ATOM	218	N	THR	A	147	66.663	12.964	5.521	1.00	7.05
ATOM	219	CA	THR	A	147	66.797	12.415	4.186	1.00	8.27
ATOM	220	C	THR	A	147	65.507	11.762	3.737	1.00	7.63
ATOM	221	O	THR	A	147	64.905	10.978	4.464	1.00	7.80
ATOM	222	CB	THR	A	147	67.946	11.337	4.123	1.00	10.82
ATOM	223	OG1	THR	A	147	69.196	11.959	4.438	1.00	10.48
ATOM	224	CG2	THR	A	147	68.038	10.665	2.727	1.00	5.24
ATOM	225	N	MET	A	148	65.164	12.020	2.486	1.00	6.94
ATOM	226	CA	MET	A	148	63.979	11.478	1.863	1.00	11.91
ATOM	227	C	MET	A	148	64.225	11.615	0.325	1.00	14.47
ATOM	228	O	MET	A	148	63.798	12.557	-0.318	1.00	14.55
ATOM	229	CB	MET	A	148	62.753	12.253	2.380	1.00	6.96
ATOM	230	CG	MET	A	148	61.416	11.531	2.124	1.00	8.52
ATOM	231	SD	MET	A	148	61.252	9.859	2.834	1.00	4.08
ATOM	232	CE	MET	A	148	61.236	10.315	4.636	1.00	2.00
ATOM	233	N	SER	A	149	64.944	10.657	-0.254	1.00	19.44
ATOM	234	CA	SER	A	149	65.312	10.735	-1.665	1.00	21.91
ATOM	235	C	SER	A	149	64.196	10.890	-2.643	1.00	24.26
ATOM	236	O	SER	A	149	64.397	11.451	-3.725	1.00	23.81
ATOM	237	CB	SER	A	149	66.174	9.545	-2.065	1.00	24.90
ATOM	238	OG	SER	A	149	65.523	8.331	-1.747	1.00	34.35

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ATOM	239	N	ASN A 150	63.018	10.397	-2.285	1.00	27.92
ATOM	240	CA	ASN A 150	61.869	10.552	-3.189	1.00	33.63
ATOM	241	C	ASN A 150	60.575	9.849	-2.769	1.00	32.38
ATOM	242	O	ASN A 150	60.503	9.251	-1.696	1.00	36.81
ATOM	243	CB	ASN A 150	62.241	10.124	-4.617	1.00	32.74
ATOM	244	CG	ASN A 150	62.792	8.726	-4.674	1.00	36.59
ATOM	245	OD1	ASN A 150	62.252	7.805	-4.058	1.00	39.51
ATOM	246	ND2	ASN A 150	63.876	8.553	-5.415	1.00	39.90
ATOM	247	N	ASN A 151	59.549	9.936	-3.612	1.00	27.39
ATOM	248	CA	ASN A 151	58.278	9.304	-3.302	1.00	22.04
ATOM	249	C	ASN A 151	58.367	7.791	-3.429	1.00	21.70
ATOM	250	O	ASN A 151	57.377	7.095	-3.269	1.00	25.53
ATOM	251	CB	ASN A 151	57.199	9.844	-4.234	1.00	24.28
ATOM	252	CG	ASN A 151	57.057	11.363	-4.144	1.00	30.19
ATOM	253	OD1	ASN A 151	56.812	12.061	-5.151	1.00	29.64
ATOM	254	ND2	ASN A 151	57.222	11.887	-2.928	1.00	34.37
ATOM	255	N	LEU A 152	59.534	7.265	-3.766	1.00	18.74
ATOM	256	CA	LEU A 152	59.657	5.829	-3.857	1.00	8.00
ATOM	257	C	LEU A 152	59.769	5.351	-2.419	1.00	8.27
ATOM	258	O	LEU A 152	59.719	4.158	-2.127	1.00	14.89
ATOM	259	CB	LEU A 152	60.866	5.451	-4.681	1.00	4.61
ATOM	260	CG	LEU A 152	60.618	5.563	-6.189	1.00	5.60
ATOM	261	CD1	LEU A 152	59.196	5.284	-6.531	1.00	2.00
ATOM	262	CD2	LEU A 152	60.967	6.978	-6.632	1.00	11.44
ATOM	263	N	VAL A 153	59.955	6.292	-1.510	1.00	2.00
ATOM	264	CA	VAL A 153	59.944	5.964	-0.103	1.00	2.65
ATOM	265	C	VAL A 153	59.204	7.138	0.515	1.00	9.93
ATOM	266	O	VAL A 153	59.494	8.284	0.211	1.00	12.65
ATOM	267	CB	VAL A 153	61.319	5.840	0.512	1.00	2.00
ATOM	268	CG1	VAL A 153	61.555	6.958	1.464	1.00	5.71
ATOM	269	CG2	VAL A 153	61.385	4.597	1.323	1.00	3.40
ATOM	270	N	THR A 154	58.253	6.874	1.401	1.00	14.26
ATOM	271	CA	THR A 154	57.470	7.972	1.947	1.00	11.59
ATOM	272	C	THR A 154	57.220	7.760	3.441	1.00	13.42
ATOM	273	O	THR A 154	56.997	6.617	3.897	1.00	15.23
ATOM	274	CB	THR A 154	56.124	8.076	1.191	1.00	10.52
ATOM	275	OG1	THR A 154	55.078	7.687	2.072	1.00	21.99
ATOM	276	CG2	THR A 154	56.049	7.087	0.018	1.00	4.65
ATOM	277	N	LEU A 155	57.316	8.848	4.204	1.00	9.88
ATOM	278	CA	LEU A 155	57.102	8.799	5.651	1.00	11.21
ATOM	279	C	LEU A 155	55.657	9.099	5.918	1.00	14.01
ATOM	280	O	LEU A 155	55.278	10.279	5.922	1.00	17.13
ATOM	281	CB	LEU A 155	57.908	9.881	6.382	1.00	6.75
ATOM	282	CG	LEU A 155	58.084	9.802	7.912	1.00	4.10
ATOM	283	CD1	LEU A 155	58.568	11.129	8.399	1.00	5.56
ATOM	284	CD2	LEU A 155	56.862	9.441	8.625	1.00	2.00
ATOM	285	N	GLU A 156	54.846	8.074	6.158	1.00	13.96
ATOM	286	CA	GLU A 156	53.463	8.358	6.457	1.00	11.80
ATOM	287	C	GLU A 156	53.056	8.227	7.920	1.00	13.99
ATOM	288	O	GLU A 156	53.535	7.358	8.675	1.00	13.56
ATOM	289	CB	GLU A 156	52.539	7.539	5.594	1.00	10.62
ATOM	290	CG	GLU A 156	52.578	6.082	5.797	1.00	11.05
ATOM	291	CD	GLU A 156	52.150	5.450	4.512	1.00	18.63
ATOM	292	OE1	GLU A 156	52.205	6.198	3.487	1.00	17.33
ATOM	293	OE2	GLU A 156	51.754	4.252	4.229	1.00	19.77
ATOM	294	N	ASN A 157	52.151	9.129	8.299	1.00	14.88
ATOM	295	CA	ASN A 157	51.603	9.204	9.643	1.00	13.66
ATOM	296	C	ASN A 157	52.621	9.525	10.684	1.00	11.06
ATOM	297	O	ASN A 157	52.313	9.514	11.863	1.00	11.30
ATOM	298	CB	ASN A 157	50.893	7.905	9.996	1.00	19.33

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ATOM	299	CG	ASN	A	157	49.431	7.902	9.553	1.00	29.18
ATOM	300	OD1	ASN	A	157	49.084	7.488	8.421	1.00	24.13
ATOM	301	ND2	ASN	A	157	48.558	8.380	10.452	1.00	36.89
ATOM	302	N	GLY	A	158	53.827	9.845	10.240	1.00	11.66
ATOM	303	CA	GLY	A	158	54.877	10.190	11.172	1.00	11.70
ATOM	304	C	GLY	A	158	55.119	8.997	12.044	1.00	13.80
ATOM	305	O	GLY	A	158	55.692	9.117	13.126	1.00	15.52
ATOM	306	N	LYS	A	159	54.669	7.835	11.579	1.00	14.81
ATOM	307	CA	LYS	A	159	54.846	6.617	12.359	1.00	20.82
ATOM	308	C	LYS	A	159	55.714	5.593	11.654	1.00	13.54
ATOM	309	O	LYS	A	159	56.565	4.934	12.279	1.00	13.89
ATOM	310	CB	LYS	A	159	53.481	5.977	12.704	1.00	30.06
ATOM	311	CG	LYS	A	159	52.231	6.835	12.414	1.00	40.43
ATOM	312	CD	LYS	A	159	51.677	7.560	13.659	1.00	49.20
ATOM	313	CE	LYS	A	159	50.313	8.235	13.356	1.00	55.22
ATOM	314	NZ	LYS	A	159	49.690	8.937	14.527	1.00	54.14
ATOM	315	N	GLN	A	160	55.483	5.444	10.367	1.00	3.14
ATOM	316	CA	GLN	A	160	56.272	4.495	9.619	1.00	10.14
ATOM	317	C	GLN	A	160	56.834	4.967	8.246	1.00	13.05
ATOM	318	O	GLN	A	160	56.478	6.041	7.705	1.00	11.67
ATOM	319	CB	GLN	A	160	55.457	3.225	9.421	1.00	12.91
ATOM	320	CG	GLN	A	160	54.631	3.243	8.120	1.00	16.70
ATOM	321	CD	GLN	A	160	53.144	3.269	8.390	1.00	13.14
ATOM	322	OE1	GLN	A	160	52.322	3.046	7.504	1.00	9.48
ATOM	323	NE2	GLN	A	160	52.798	3.564	9.632	1.00	15.97
ATOM	324	N	LEU	A	161	57.735	4.146	7.698	1.00	11.14
ATOM	325	CA	LEU	A	161	58.331	4.428	6.397	1.00	6.57
ATOM	326	C	LEU	A	161	57.812	3.315	5.528	1.00	6.52
ATOM	327	O	LEU	A	161	57.938	2.129	5.868	1.00	2.00
ATOM	328	CB	LEU	A	161	59.849	4.360	6.435	1.00	6.21
ATOM	329	CG	LEU	A	161	60.586	5.439	7.194	1.00	3.15
ATOM	330	CD1	LEU	A	161	61.976	4.961	7.618	1.00	2.00
ATOM	331	CD2	LEU	A	161	60.599	6.668	6.313	1.00	3.75
ATOM	332	N	THR	A	162	57.243	3.706	4.395	1.00	10.02
ATOM	333	CA	THR	A	162	56.623	2.763	3.464	1.00	10.62
ATOM	334	C	THR	A	162	57.297	2.812	2.129	1.00	10.71
ATOM	335	O	THR	A	162	57.534	3.895	1.578	1.00	12.23
ATOM	336	CB	THR	A	162	55.136	3.122	3.221	1.00	12.80
ATOM	337	OG1	THR	A	162	54.370	2.791	4.375	1.00	9.93
ATOM	338	CG2	THR	A	162	54.560	2.355	2.050	1.00	12.02
ATOM	339	N	VAL	A	163	57.526	1.635	1.572	1.00	7.72
ATOM	340	CA	VAL	A	163	58.214	1.556	0.305	1.00	6.49
ATOM	341	C	VAL	A	163	57.326	1.072	-0.832	1.00	6.05
ATOM	342	O	VAL	A	163	56.554	0.121	-0.696	1.00	4.72
ATOM	343	CB	VAL	A	163	59.471	0.609	0.420	1.00	7.36
ATOM	344	CG1	VAL	A	163	60.545	1.237	1.307	1.00	2.00
ATOM	345	CG2	VAL	A	163	59.061	-0.746	0.982	1.00	2.00
ATOM	346	N	LYS	A	164	57.496	1.684	-1.988	1.00	4.73
ATOM	347	CA	LYS	A	164	56.697	1.301	-3.128	1.00	7.98
ATOM	348	C	LYS	A	164	57.343	0.237	-3.965	1.00	10.68
ATOM	349	O	LYS	A	164	56.659	-0.412	-4.747	1.00	16.60
ATOM	350	CB	LYS	A	164	56.439	2.497	-4.030	1.00	7.35
ATOM	351	CG	LYS	A	164	55.920	3.715	-3.301	1.00	20.46
ATOM	352	CD	LYS	A	164	54.913	4.511	-4.157	1.00	28.52
ATOM	353	CE	LYS	A	164	54.376	5.727	-3.393	1.00	33.30
ATOM	354	NZ	LYS	A	164	53.764	5.340	-2.073	1.00	44.25
ATOM	355	N	ARG	A	165	58.653	0.059	-3.831	1.00	10.57
ATOM	356	CA	ARG	A	165	59.331	-0.919	-4.667	1.00	11.92
ATOM	357	C	ARG	A	165	59.818	-2.131	-3.934	1.00	12.90
ATOM	358	O	ARG	A	165	60.486	-1.984	-2.913	1.00	18.12

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ATOM	359	CB	ARG	A	165	60.508	-0.262	-5.361	1.00	11.20
ATOM	360	CG	ARG	A	165	60.181	0.189	-6.775	1.00	15.32
ATOM	361	CD	ARG	A	165	60.564	1.649	-6.977	1.00	20.12
ATOM	362	NE	ARG	A	165	61.704	1.761	-7.866	1.00	14.57
ATOM	363	CZ	ARG	A	165	61.657	2.356	-9.041	1.00	15.05
ATOM	364	NH1	ARG	A	165	60.529	2.900	-9.477	1.00	18.39
ATOM	365	NH2	ARG	A	165	62.727	2.348	-9.809	1.00	22.19
ATOM	366	N	GLN	A	166	59.490	-3.332	-4.415	1.00	11.00
ATOM	367	CA	GLN	A	166	59.974	-4.528	-3.707	1.00	16.99
ATOM	368	C	GLN	A	166	61.485	-4.494	-3.666	1.00	18.86
ATOM	369	O	GLN	A	166	62.106	-3.763	-4.435	1.00	24.95
ATOM	370	CB	GLN	A	166	59.539	-5.829	-4.383	1.00	14.52
ATOM	371	CG	GLN	A	166	60.139	-6.034	-5.712	1.00	12.46
ATOM	372	CD	GLN	A	166	59.222	-6.784	-6.623	1.00	21.84
ATOM	373	OE1	GLN	A	166	58.044	-6.952	-6.322	1.00	23.35
ATOM	374	NE2	GLN	A	166	59.751	-7.263	-7.748	1.00	27.55
ATOM	375	N	GLY	A	167	62.097	-5.251	-2.771	1.00	14.79
ATOM	376	CA	GLY	A	167	63.539	-5.234	-2.768	1.00	17.22
ATOM	377	C	GLY	A	167	64.293	-5.445	-1.477	1.00	20.59
ATOM	378	O	GLY	A	167	63.697	-5.637	-0.419	1.00	24.49
ATOM	379	N	LEU	A	168	65.623	-5.424	-1.570	1.00	16.95
ATOM	380	CA	LEU	A	168	66.460	-5.574	-0.393	1.00	12.13
ATOM	381	C	LEU	A	168	66.694	-4.139	0.122	1.00	8.01
ATOM	382	O	LEU	A	168	66.789	-3.207	-0.668	1.00	8.68
ATOM	383	CB	LEU	A	168	67.778	-6.226	-0.788	1.00	16.15
ATOM	384	CG	LEU	A	168	68.101	-7.658	-0.364	1.00	20.66
ATOM	385	CD1	LEU	A	168	67.298	-8.034	0.846	1.00	28.37
ATOM	386	CD2	LEU	A	168	67.793	-8.604	-1.509	1.00	26.17
ATOM	387	N	TYR	A	169	66.760	-3.944	1.428	1.00	2.00
ATOM	388	CA	TYR	A	169	66.956	-2.611	1.946	1.00	2.00
ATOM	389	C	TYR	A	169	67.741	-2.787	3.226	1.00	5.27
ATOM	390	O	TYR	A	169	67.667	-3.849	3.891	1.00	4.60
ATOM	391	CB	TYR	A	169	65.622	-1.966	2.310	1.00	2.00
ATOM	392	CG	TYR	A	169	64.676	-1.612	1.173	1.00	2.68
ATOM	393	CD1	TYR	A	169	63.903	-2.600	0.502	1.00	2.00
ATOM	394	CD2	TYR	A	169	64.529	-0.277	0.784	1.00	2.29
ATOM	395	CE1	TYR	A	169	63.012	-2.252	-0.535	1.00	2.00
ATOM	396	CE2	TYR	A	169	63.660	0.080	-0.227	1.00	2.00
ATOM	397	CZ	TYR	A	169	62.903	-0.905	-0.887	1.00	2.00
ATOM	398	OH	TYR	A	169	62.052	-0.523	-1.903	1.00	8.09
ATOM	399	N	TYR	A	170	68.539	-1.780	3.557	1.00	4.97
ATOM	400	CA	TYR	A	170	69.285	-1.859	4.792	1.00	7.93
ATOM	401	C	TYR	A	170	68.456	-0.963	5.631	1.00	10.88
ATOM	402	O	TYR	A	170	68.262	0.220	5.263	1.00	12.24
ATOM	403	CB	TYR	A	170	70.706	-1.288	4.693	1.00	7.04
ATOM	404	CG	TYR	A	170	71.408	-1.249	6.047	1.00	3.21
ATOM	405	CD1	TYR	A	170	71.719	-2.418	6.689	1.00	2.00
ATOM	406	CD2	TYR	A	170	71.645	-0.026	6.717	1.00	2.03
ATOM	407	CE1	TYR	A	170	72.211	-2.400	7.913	1.00	2.00
ATOM	408	CE2	TYR	A	170	72.152	-0.006	7.976	1.00	2.00
ATOM	409	CZ	TYR	A	170	72.423	-1.209	8.562	1.00	2.00
ATOM	410	OH	TYR	A	170	72.899	-1.253	9.836	1.00	3.83
ATOM	411	N	ILE	A	171	67.970	-1.532	6.743	1.00	8.70
ATOM	412	CA	ILE	A	171	67.110	-0.802	7.660	1.00	12.19
ATOM	413	C	ILE	A	171	67.710	-0.548	9.042	1.00	7.20
ATOM	414	O	ILE	A	171	68.321	-1.435	9.625	1.00	7.41
ATOM	415	CB	ILE	A	171	65.704	-1.515	7.776	1.00	14.23
ATOM	416	CG1	ILE	A	171	65.012	-1.494	6.398	1.00	12.72
ATOM	417	CG2	ILE	A	171	64.802	-0.749	8.764	1.00	16.37
ATOM	418	CD1	ILE	A	171	63.976	-2.493	6.222	1.00	11.62

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ATOM	419	N	TYR A 172	67.522	0.655	9.577	1.00	2.48
ATOM	420	CA	TYR A 172	68.104	0.965	10.872	1.00	2.93
ATOM	421	C	TYR A 172	67.317	1.973	11.666	1.00	8.63
ATOM	422	O	TYR A 172	66.534	2.758	11.110	1.00	15.64
ATOM	423	CB	TYR A 172	69.482	1.558	10.663	1.00	5.18
ATOM	424	CG	TYR A 172	69.472	2.916	9.932	1.00	3.91
ATOM	425	CD1	TYR A 172	69.395	2.983	8.554	1.00	3.93
ATOM	426	CD2	TYR A 172	69.566	4.117	10.620	1.00	2.00
ATOM	427	CE1	TYR A 172	69.407	4.187	7.897	1.00	2.00
ATOM	428	CE2	TYR A 172	69.582	5.316	9.952	1.00	2.00
ATOM	429	CZ	TYR A 172	69.495	5.334	8.591	1.00	2.00
ATOM	430	OH	TYR A 172	69.425	6.502	7.877	1.00	2.00
ATOM	431	N	ALA A 173	67.614	2.025	12.955	1.00	2.50
ATOM	432	CA	ALA A 173	66.952	2.947	13.836	1.00	3.16
ATOM	433	C	ALA A 173	67.904	3.147	14.967	1.00	7.89
ATOM	434	O	ALA A 173	68.336	2.186	15.575	1.00	12.80
ATOM	435	CB	ALA A 173	65.726	2.348	14.343	1.00	2.00
ATOM	436	N	GLN A 174	68.268	4.380	15.252	1.00	11.39
ATOM	437	CA	GLN A 174	69.178	4.633	16.360	1.00	14.94
ATOM	438	C	GLN A 174	68.226	5.213	17.352	1.00	15.25
ATOM	439	O	GLN A 174	67.470	6.132	17.009	1.00	15.09
ATOM	440	CB	GLN A 174	70.222	5.719	15.999	1.00	25.47
ATOM	441	CG	GLN A 174	71.663	5.547	16.545	1.00	29.78
ATOM	442	CP	GLN A 174	71.995	6.399	17.819	1.00	37.27
ATOM	443	OE1	GLN A 174	73.166	6.645	18.124	1.00	42.67
ATOM	444	NE2	GLN A 174	70.973	6.819	18.554	1.00	33.19
ATOM	445	N	VAL A 175	68.282	4.709	18.579	1.00	17.17
ATOM	446	CA	VAL A 175	67.413	5.209	19.638	1.00	17.55
ATOM	447	C	VAL A 175	68.131	5.351	20.970	1.00	17.69
ATOM	448	O	VAL A 175	68.700	4.412	21.504	1.00	22.37
ATOM	449	CB	VAL A 175	66.208	4.282	19.860	1.00	16.39
ATOM	450	CG1	VAL A 175	65.567	4.577	21.243	1.00	12.42
ATOM	451	CG2	VAL A 175	65.216	4.465	18.731	1.00	10.94
ATOM	452	N	THR A 176	68.139	6.543	21.502	1.00	17.07
ATOM	453	CA	THR A 176	68.757	6.715	22.785	1.00	20.53
ATOM	454	C	THR A 176	67.575	7.169	23.631	1.00	26.74
ATOM	455	O	THR A 176	66.643	7.790	23.102	1.00	31.79
ATOM	456	CB	THR A 176	69.852	7.804	22.752	1.00	20.81
ATOM	457	OG1	THR A 176	69.645	8.697	23.853	1.00	23.45
ATOM	458	CG2	THR A 176	69.835	8.611	21.417	1.00	16.18
ATOM	459	N	PHE A 177	67.612	6.876	24.927	1.00	26.18
ATOM	460	CA	PHE A 177	66.527	7.233	25.829	1.00	20.88
ATOM	461	C	PHE A 177	67.139	7.602	27.158	1.00	22.65
ATOM	462	O	PHE A 177	68.332	7.369	27.375	1.00	25.78
ATOM	463	CB	PHE A 177	65.565	6.058	25.993	1.00	13.75
ATOM	464	CG	PHE A 177	66.197	4.815	26.557	1.00	12.35
ATOM	465	CD1	PHE A 177	66.899	3.931	25.736	1.00	12.35
ATOM	466	CD2	PHE A 177	66.027	4.487	27.888	1.00	11.24
ATOM	467	CE1	PHE A 177	67.409	2.730	26.234	1.00	8.24
ATOM	468	CE2	PHE A 177	66.530	3.299	28.383	1.00	7.55
ATOM	469	CZ	PHE A 177	67.220	2.418	27.558	1.00	6.95
ATOM	470	N	CYS A 178	66.323	8.170	28.040	1.00	23.01
ATOM	471	CA	CYS A 178	66.773	8.635	29.346	1.00	21.06
ATOM	472	C	CYS A 178	65.839	8.131	30.377	1.00	21.82
ATOM	473	O	CYS A 178	64.661	8.395	30.288	1.00	23.34
ATOM	474	CB	CYS A 178	66.735	10.141	29.411	1.00	16.04
ATOM	475	SG	CYS A 178	67.912	10.649	30.645	1.00	20.42
ATOM	476	N	SER A 179	66.342	7.431	31.373	1.00	24.99
ATOM	477	CA	SER A 179	65.443	6.894	32.361	1.00	28.88
ATOM	478	C	SER A 179	66.117	6.666	33.675	1.00	33.09

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ATOM	479	O	SER A 179	67.206	7.143	33.912	1.00	35.22
ATOM	480	CB	SER A 179	64.872	5.586	31.860	1.00	29.98
ATOM	481	OG	SER A 179	65.927	4.661	31.729	1.00	32.36
ATOM	482	N	ASN A 180	65.451	5.933	34.547	1.00	42.18
ATOM	483	CA	ASN A 180	66.000	5.672	35.865	1.00	48.63
ATOM	484	C	ASN A 180	65.862	4.215	36.272	1.00	50.05
ATOM	485	O	ASN A 180	65.031	3.492	35.727	1.00	51.30
ATOM	486	CB	ASN A 180	65.291	6.555	36.879	1.00	50.44
ATOM	487	CG	ASN A 180	66.101	6.746	38.112	1.00	52.90
ATOM	488	OD1	ASN A 180	65.993	5.969	39.064	1.00	55.56
ATOM	489	ND2	ASN A 180	66.954	7.766	38.101	1.00	53.24
ATOM	490	N	ARG A 181	66.659	3.779	37.236	1.00	52.77
ATOM	491	CA	ARG A 181	66.553	2.396	37.652	1.00	59.50
ATOM	492	C	ARG A 181	65.154	2.167	38.222	1.00	64.73
ATOM	493	O	ARG A 181	64.315	1.584	37.545	1.00	64.19
ATOM	494	CB	ARG A 181	67.642	2.018	38.681	1.00	61.83
ATOM	495	CG	ARG A 181	67.558	2.704	40.048	1.00	65.13
ATOM	496	CD	ARG A 181	68.043	1.776	41.158	1.00	68.43
ATOM	497	NE	ARG A 181	67.157	1.790	42.318	1.00	73.16
ATOM	498	CZ	ARG A 181	66.185	0.900	42.533	1.00	77.98
ATOM	499	NH1	ARG A 181	65.959	-0.090	41.669	1.00	77.85
ATOM	500	NH2	ARG A 181	65.432	1.002	43.620	1.00	78.32
ATOM	501	N	GLU A 182	64.890	2.670	39.432	1.00	68.56
ATOM	502	CA	GLU A 182	63.602	2.482	40.087	1.00	69.15
ATOM	503	C	GLU A 182	62.458	3.231	39.468	1.00	70.34
ATOM	504	O	GLU A 182	61.363	2.694	39.421	1.00	71.60
ATOM	505	CB	GLU A 182	63.685	2.858	41.564	1.00	71.44
ATOM	506	CG	GLU A 182	62.427	2.535	42.378	1.00	75.91
ATOM	507	CD	GLU A 182	61.767	1.214	41.993	1.00	76.30
ATOM	508	OE1	GLU A 182	60.579	1.227	41.618	1.00	76.66
ATOM	509	OE2	GLU A 182	62.423	0.159	42.071	1.00	77.00
ATOM	510	N	ALA A 183	62.698	4.459	39.005	1.00	72.39
ATOM	511	CA	ALA A 183	61.644	5.279	38.389	1.00	75.78
ATOM	512	C	ALA A 183	60.565	4.414	37.737	1.00	76.77
ATOM	513	O	ALA A 183	59.553	4.075	38.354	1.00	77.69
ATOM	514	CB	ALA A 183	62.247	6.185	37.360	1.00	78.21
ATOM	515	N	SER A 184	60.766	4.077	36.472	1.00	76.88
ATOM	516	CA	SER A 184	59.818	3.197	35.811	1.00	78.01
ATOM	517	C	SER A 184	60.307	1.801	36.235	1.00	76.96
ATOM	518	O	SER A 184	59.534	0.845	36.367	1.00	75.08
ATOM	519	CB	SER A 184	59.896	3.366	34.284	1.00	79.65
ATOM	520	OG	SER A 184	58.749	4.032	33.764	1.00	79.24
ATOM	521	N	SER A 185	61.610	1.721	36.487	1.00	75.77
ATOM	522	CA	SER A 185	62.242	0.478	36.888	1.00	75.07
ATOM	523	C	SER A 185	61.704	-0.683	36.096	1.00	72.62
ATOM	524	O	SER A 185	62.241	-1.019	35.043	1.00	72.82
ATOM	525	CB	SER A 185	62.042	0.226	38.381	1.00	78.18
ATOM	526	OG	SER A 185	63.267	-0.180	38.979	1.00	80.22
ATOM	527	N	GLN A 186	60.634	-1.285	36.600	1.00	69.69
ATOM	528	CA	GLN A 186	60.019	-2.420	35.938	1.00	68.20
ATOM	529	C	GLN A 186	61.094	-3.320	35.311	1.00	66.62
ATOM	530	O	GLN A 186	62.090	-3.696	35.957	1.00	66.27
ATOM	531	CB	GLN A 186	59.044	-1.933	34.849	1.00	67.36
ATOM	532	CG	GLN A 186	59.621	-0.869	33.905	1.00	68.90
ATOM	533	CD	GLN A 186	59.791	-1.362	32.469	1.00	70.37
ATOM	534	OE1	GLN A 186	59.068	-2.258	32.024	1.00	70.76
ATOM	535	NE2	GLN A 186	60.746	-0.772	31.737	1.00	67.42
ATOM	536	N	ALA A 187	60.865	-3.652	34.041	1.00	61.20
ATOM	537	CA	ALA A 187	61.754	-4.478	33.248	1.00	50.70
ATOM	538	C	ALA A 187	62.581	-3.561	32.349	1.00	43.79

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ATOM	539	O	ALA A 187	62.539	-2.331	32.478	1.00	42.07
ATOM	540	CB	ALA A 187	60.916	-5.434	32.411	1.00	54.64
ATOM	541	N	PRO A 188	63.358	-4.144	31.430	1.00	37.44
ATOM	542	CA	PRO A 188	64.155	-3.307	30.555	1.00	36.73
ATOM	543	C	PRO A 188	63.358	-2.420	29.610	1.00	33.87
ATOM	544	O	PRO A 188	62.124	-2.423	29.608	1.00	39.05
ATOM	545	CB	PRO A 188	65.013	-4.318	29.797	1.00	37.81
ATOM	546	CG	PRO A 188	64.246	-5.509	29.779	1.00	32.28
ATOM	547	CD	PRO A 188	63.628	-5.557	31.143	1.00	38.41
ATOM	548	N	PHE A 189	64.107	-1.667	28.809	1.00	26.88
ATOM	549	CA	PHE A 189	63.582	-0.752	27.812	1.00	17.48
ATOM	550	C	PHE A 189	63.885	-1.454	26.487	1.00	12.83
ATOM	551	O	PHE A 189	65.011	-1.422	26.005	1.00	13.14
ATOM	552	CB	PHE A 189	64.337	0.595	27.906	1.00	13.74
ATOM	553	CG	PHE A 189	64.039	1.550	26.779	1.00	10.76
ATOM	554	CD1	PHE A 189	64.534	1.305	25.509	1.00	12.14
ATOM	555	CD2	PHE A 189	63.134	2.594	26.951	1.00	6.39
ATOM	556	CE1	PHE A 189	64.109	2.068	24.424	1.00	15.58
ATOM	557	CE2	PHE A 189	62.706	3.360	25.878	1.00	2.56
ATOM	558	CZ	PHE A 189	63.181	3.099	24.613	1.00	9.30
ATOM	559	N	ILE A 190	62.930	-2.150	25.903	1.00	6.54
ATOM	560	CA	ILE A 190	63.264	-2.766	24.638	1.00	7.67
ATOM	561	C	ILE A 190	62.719	-1.925	23.471	1.00	9.21
ATOM	562	O	ILE A 190	61.654	-1.319	23.583	1.00	10.36
ATOM	563	CB	ILE A 190	62.797	-4.267	24.581	1.00	2.00
ATOM	564	CG1	ILE A 190	61.595	-4.432	23.687	1.00	12.49
ATOM	565	CG2	ILE A 190	62.531	-4.770	25.890	1.00	2.00
ATOM	566	CD1	ILE A 190	61.991	-4.460	22.210	1.00	22.66
ATOM	567	N	ALA A 191	63.474	-1.833	22.376	1.00	5.82
ATOM	568	CA	ALA A 191	63.013	-1.075	21.220	1.00	5.16
ATOM	569	C	ALA A 191	62.929	-2.092	20.110	1.00	5.59
ATOM	570	O	ALA A 191	63.673	-3.049	20.125	1.00	8.06
ATOM	571	CB	ALA A 191	63.977	-0.001	20.878	1.00	2.00
ATOM	572	N	SER A 192	62.001	-1.928	19.175	1.00	6.44
ATOM	573	CA	SER A 192	61.850	-2.905	18.099	1.00	7.35
ATOM	574	C	SER A 192	61.562	-2.296	16.762	1.00	8.22
ATOM	575	O	SER A 192	60.782	-1.321	16.678	1.00	3.46
ATOM	576	CB	SER A 192	60.715	-3.876	18.395	1.00	10.15
ATOM	577	OG	SER A 192	60.544	-4.055	19.785	1.00	20.22
ATOM	578	N	LEU A 193	62.220	-2.851	15.730	1.00	2.00
ATOM	579	CA	LEU A 193	62.012	-2.386	14.381	1.00	2.00
ATOM	580	C	LEU A 193	60.970	-3.317	13.819	1.00	2.00
ATOM	581	O	LEU A 193	61.204	-4.513	13.708	1.00	2.00
ATOM	582	CB	LEU A 193	63.318	-2.410	13.581	1.00	2.34
ATOM	583	CG	LEU A 193	63.387	-1.682	12.213	1.00	2.08
ATOM	584	CD1	LEU A 193	64.125	-2.568	11.197	1.00	2.35
ATOM	585	CD2	LEU A 193	62.017	-1.421	11.651	1.00	2.00
ATOM	586	N	CYS A 194	59.785	-2.767	13.538	1.00	3.96
ATOM	587	CA	CYS A 194	58.671	-3.564	13.028	1.00	3.85
ATOM	588	C	CYS A 194	58.336	-3.332	11.583	1.00	2.83
ATOM	589	O	CYS A 194	58.482	-2.230	11.040	1.00	2.00
ATOM	590	CB	CYS A 194	57.434	-3.344	13.899	1.00	2.00
ATOM	591	SG	CYS A 194	57.686	-3.804	15.654	1.00	12.30
ATOM	592	N	LEU A 195	57.861	-4.390	10.956	1.00	2.47
ATOM	593	CA	LEU A 195	57.557	-4.319	9.548	1.00	2.00
ATOM	594	C	LEU A 195	56.157	-4.738	9.416	1.00	8.69
ATOM	595	O	LEU A 195	55.708	-5.678	10.081	1.00	7.70
ATOM	596	CB	LEU A 195	58.412	-5.311	8.795	1.00	5.21
ATOM	597	CG	LEU A 195	57.818	-6.022	7.616	1.00	2.00
ATOM	598	CD1	LEU A 195	57.706	-5.049	6.514	1.00	2.00



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ATOM	599	CD2	LEU	A	195	58.659	-7.186	7.250	1.00	2.00
ATOM	600	N	LYS	A	196	55.474	-4.066	8.512	1.00	14.95
ATOM	601	CA	LYS	A	196	54.080	-4.352	8.256	1.00	17.18
ATOM	602	C	LYS	A	196	53.906	-4.440	6.748	1.00	19.04
ATOM	603	O	LYS	A	196	53.817	-3.413	6.066	1.00	22.68
ATOM	604	CB	LYS	A	196	53.208	-3.239	8.843	1.00	10.86
ATOM	605	CG	LYS	A	196	51.722	-3.473	8.657	1.00	19.19
ATOM	606	CD	LYS	A	196	51.294	-4.849	9.253	1.00	28.06
ATOM	607	CE	LYS	A	196	50.080	-5.448	8.553	1.00	22.96
ATOM	608	NZ	LYS	A	196	49.978	-4.923	7.165	1.00	29.68
ATOM	609	N	SER	A	197	53.884	-5.658	6.212	1.00	17.44
ATOM	610	CA	SER	A	197	53.723	-5.790	4.771	1.00	18.05
ATOM	611	C	SER	A	197	52.257	-5.957	4.447	1.00	20.94
ATOM	612	O	SER	A	197	51.496	-6.530	5.228	1.00	20.83
ATOM	613	CB	SER	A	197	54.479	-7.001	4.229	1.00	20.06
ATOM	614	OG	SER	A	197	53.864	-7.532	3.049	1.00	22.46
ATOM	615	N	PRO	A	198	51.855	-5.513	3.248	1.00	23.14
ATOM	616	CA	PRO	A	198	50.459	-5.627	2.834	1.00	19.36
ATOM	617	C	PRO	A	198	49.939	-7.047	2.931	1.00	17.02
ATOM	618	O	PRO	A	198	50.609	-7.978	2.552	1.00	20.04
ATOM	619	CB	PRO	A	198	50.474	-5.148	1.382	1.00	17.36
ATOM	620	CG	PRO	A	198	51.908	-5.290	0.928	1.00	19.13
ATOM	621	CD	PRO	A	198	52.681	-4.923	2.177	1.00	25.36
ATOM	622	N	GLY	A	199	48.751	-7.202	3.486	1.00	20.84
ATOM	623	CA	GLY	A	199	48.129	-8.504	3.557	1.00	18.97
ATOM	624	C	GLY	A	199	48.826	-9.457	4.469	1.00	17.59
ATOM	625	O	GLY	A	199	48.685	-10.662	4.321	1.00	20.09
ATOM	626	N	ARG	A	200	49.570	-8.924	5.422	1.00	17.00
ATOM	627	CA	ARG	A	200	50.289	-9.777	6.356	1.00	16.81
ATOM	628	C	ARG	A	200	50.189	-9.140	7.699	1.00	17.77
ATOM	629	O	ARG	A	200	50.063	-7.907	7.800	1.00	14.78
ATOM	630	CB	ARG	A	200	51.759	-9.880	5.989	1.00	15.22
ATOM	631	CG	ARG	A	200	51.978	-10.280	4.571	1.00	14.22
ATOM	632	CD	ARG	A	200	51.723	-11.735	4.443	1.00	14.54
ATOM	633	NE	ARG	A	200	51.789	-12.128	3.056	1.00	27.29
ATOM	634	CZ	ARG	A	200	52.229	-13.306	2.646	1.00	35.34
ATOM	635	NH1	ARG	A	200	52.646	-14.207	3.538	1.00	35.17
ATOM	636	NH2	ARG	A	200	52.250	-13.571	1.340	1.00	42.93
ATOM	637	N	PHE	A	201	50.239	-9.965	8.737	1.00	18.09
ATOM	638	CA	PHE	A	201	50.175	-9.412	10.070	1.00	20.81
ATOM	639	C	PHE	A	201	51.501	-8.721	10.305	1.00	22.10
ATOM	640	O	PHE	A	201	52.486	-8.949	9.582	1.00	25.97
ATOM	641	CB	PHE	A	201	49.981	-10.516	11.102	1.00	23.86
ATOM	642	CG	PHE	A	201	48.620	-11.129	11.065	1.00	38.71
ATOM	643	CD1	PHE	A	201	47.638	-10.745	11.989	1.00	45.17
ATOM	644	CD2	PHE	A	201	48.292	-12.069	10.078	1.00	42.82
ATOM	645	CE1	PHE	A	201	46.342	-11.295	11.920	1.00	47.04
ATOM	646	CE2	PHE	A	201	47.004	-12.627	9.993	1.00	43.06
ATOM	647	CZ	PHE	A	201	46.028	-12.241	10.910	1.00	45.40
ATOM	648	N	GLU	A	202	51.535	-7.866	11.304	1.00	17.05
ATOM	649	CA	GLU	A	202	52.760	-7.221	11.642	1.00	16.87
ATOM	650	C	GLU	A	202	53.815	-8.309	11.856	1.00	19.86
ATOM	651	O	GLU	A	202	53.578	-9.497	11.605	1.00	23.81
ATOM	652	CB	GLU	A	202	52.555	-6.457	12.903	1.00	16.99
ATOM	653	CG	GLU	A	202	51.617	-5.367	12.707	1.00	23.80
ATOM	654	CD	GLU	A	202	51.392	-4.637	13.979	1.00	35.91
ATOM	655	OE1	GLU	A	202	51.758	-5.194	15.053	1.00	35.76
ATOM	656	OE2	GLU	A	202	50.844	-3.507	13.895	1.00	44.48
ATOM	657	N	ARG	A	203	54.979	-7.908	12.344	1.00	19.53
ATOM	658	CA	ARG	A	203	56.076	-8.835	12.557	1.00	16.44

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ATOM	659	C	ARG A 203	57.253	-8.000	13.036	1.00	15.24
ATOM	660	O	ARG A 203	57.349	-6.798	12.729	1.00	16.88
ATOM	661	CB	ARG A 203	56.394	-9.555	11.235	1.00	15.75
ATOM	662	CG	ARG A 203	57.796	-10.074	11.086	1.00	23.48
ATOM	663	CD	ARG A 203	57.866	-11.532	10.566	1.00	30.43
ATOM	664	NE	ARG A 203	59.225	-12.059	10.745	1.00	41.14
ATOM	665	CZ	ARG A 203	59.724	-12.591	11.874	1.00	47.61
ATOM	666	NH1	ARG A 203	59.005	-12.628	12.997	1.00	46.23
ATOM	667	NH2	ARG A 203	60.997	-13.009	11.907	1.00	51.58
ATOM	668	N	ILE A 204	58.107	-8.623	13.841	1.00	12.76
ATOM	669	CA	ILE A 204	59.291	-7.964	14.360	1.00	7.26
ATOM	670	C	ILE A 204	60.537	-8.400	13.567	1.00	7.61
ATOM	671	O	ILE A 204	60.771	-9.600	13.293	1.00	4.59
ATOM	672	CB	ILE A 204	59.478	-8.312	15.835	1.00	4.07
ATOM	673	CG1	ILE A 204	58.374	-7.673	16.658	1.00	7.58
ATOM	674	CG2	ILE A 204	60.768	-7.798	16.331	1.00	6.94
ATOM	675	CD1	ILE A 204	58.675	-7.562	18.143	1.00	7.31
ATOM	676	N	LEU A 205	61.326	-7.414	13.167	1.00	6.43
ATOM	677	CA	LEU A 205	62.547	-7.718	12.462	1.00	2.00
ATOM	678	C	LEU A 205	63.705	-7.634	13.486	1.00	2.51
ATOM	679	O	LEU A 205	64.403	-8.606	13.701	1.00	8.74
ATOM	680	CB	LEU A 205	62.747	-6.750	11.301	1.00	2.00
ATOM	681	CG	LEU A 205	61.658	-6.828	10.231	1.00	2.00
ATOM	682	CD1	LEU A 205	61.958	-5.805	9.114	1.00	2.00
ATOM	683	CD2	LEU A 205	61.522	-8.280	9.726	1.00	2.00
ATOM	684	N	LEU A 206	63.905	-6.516	14.160	1.00	2.00
ATOM	685	CA	LEU A 206	65.015	-6.442	15.107	1.00	4.82
ATOM	686	C	LEU A 206	64.555	-5.851	16.427	1.00	5.87
ATOM	687	O	LEU A 206	63.534	-5.162	16.472	1.00	9.33
ATOM	688	CB	LEU A 206	66.133	-5.512	14.594	1.00	10.44
ATOM	689	CG	LEU A 206	66.919	-5.440	13.296	1.00	2.00
ATOM	690	CD1	LEU A 206	66.665	-6.534	12.378	1.00	2.00
ATOM	691	CD2	LEU A 206	66.528	-4.191	12.692	1.00	2.00
ATOM	692	N	ARG A 207	65.402	-5.973	17.447	1.00	2.49
ATOM	693	CA	ARG A 207	65.076	-5.478	18.756	1.00	4.00
ATOM	694	C	ARG A 207	66.307	-5.359	19.586	1.00	4.58
ATOM	695	O	ARG A 207	67.109	-6.262	19.616	1.00	11.27
ATOM	696	CB	ARG A 207	64.177	-6.462	19.470	1.00	15.58
ATOM	697	CG	ARG A 207	62.694	-6.237	19.294	1.00	19.52
ATOM	698	CD	ARG A 207	61.941	-7.352	19.951	1.00	23.55
ATOM	699	NE	ARG A 207	61.113	-6.904	21.061	1.00	29.30
ATOM	700	CZ	ARG A 207	60.714	-7.703	22.043	1.00	32.93
ATOM	701	NH1	ARG A 207	61.073	-8.984	22.051	1.00	38.59
ATOM	702	NH2	ARG A 207	59.905	-7.246	22.984	1.00	36.04
ATOM	703	N	ALA A 208	66.407	-4.276	20.330	1.00	5.26
ATOM	704	CA	ALA A 208	67.530	-4.013	21.209	1.00	7.53
ATOM	705	C	ALA A 208	66.923	-3.782	22.588	1.00	13.36
ATOM	706	O	ALA A 208	65.750	-3.416	22.688	1.00	17.68
ATOM	707	CB	ALA A 208	68.219	-2.760	20.761	1.00	6.77
ATOM	708	N	ALA A 209	67.708	-3.913	23.649	1.00	15.98
ATOM	709	CA	ALA A 209	67.141	-3.716	24.966	1.00	17.90
ATOM	710	C	ALA A 209	68.168	-3.576	26.058	1.00	24.16
ATOM	711	O	ALA A 209	68.993	-4.458	26.264	1.00	26.79
ATOM	712	CB	ALA A 209	66.286	-4.856	25.269	1.00	21.40
ATOM	713	N	ASN A 210	68.072	-2.488	26.799	1.00	29.32
ATOM	714	CA	ASN A 210	69.000	-2.209	27.887	1.00	31.61
ATOM	715	C	ASN A 210	68.280	-2.219	29.217	1.00	30.69
ATOM	716	O	ASN A 210	67.071	-2.323	29.279	1.00	28.28
ATOM	717	CB	ASN A 210	69.652	-0.832	27.675	1.00	32.66
ATOM	718	CG	ASN A 210	70.615	-0.837	26.519	1.00	35.38

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ATOM	719	OD1	ASN	A	210	70.292	-1.334	25.428	1.00	31.08
ATOM	720	ND2	ASN	A	210	71.823	-0.328	26.755	1.00	37.26
ATOM	721	N	THR	A	211	69.035	-2.071	30.287	1.00	33.88
ATOM	722	CA	THR	A	211	68.447	-2.059	31.607	1.00	35.15
ATOM	723	C	THR	A	211	68.635	-0.694	32.246	1.00	38.63
ATOM	724	O	THR	A	211	69.765	-0.309	32.552	1.00	42.19
ATOM	725	CB	THR	A	211	69.097	-3.109	32.502	1.00	30.80
ATOM	726	OG1	THR	A	211	69.688	-4.133	31.704	1.00	29.56
ATOM	727	CG2	THR	A	211	68.070	-3.738	33.363	1.00	35.49
ATOM	728	N	HIS	A	212	67.527	0.013	32.464	1.00	39.93
ATOM	729	CA	HIS	A	212	67.542	1.343	33.064	1.00	40.49
ATOM	730	C	HIS	A	212	68.719	1.599	34.034	1.00	40.25
ATOM	731	O	HIS	A	212	69.039	0.805	34.936	1.00	34.80
ATOM	732	CB	HIS	A	212	66.199	1.623	33.775	1.00	41.34
ATOM	733	CG	HIS	A	212	64.993	1.551	32.882	1.00	41.41
ATOM	734	ND1	HIS	A	212	63.874	0.807	33.195	1.00	44.27
ATOM	735	CD2	HIS	A	212	64.746	2.092	31.664	1.00	40.94
ATOM	736	CE1	HIS	A	212	62.998	0.879	32.211	1.00	41.42
ATOM	737	NE2	HIS	A	212	63.504	1.654	31.267	1.00	42.09
ATOM	738	N	SER	A	213	69.377	2.725	33.810	1.00	42.95
ATOM	739	CA	SER	A	213	70.500	3.129	34.640	1.00	44.87
ATOM	740	C	SER	A	213	69.935	3.766	35.889	1.00	44.10
ATOM	741	O	SER	A	213	68.726	3.898	36.035	1.00	45.98
ATOM	742	CB	SER	A	213	71.373	4.145	33.885	1.00	47.74
ATOM	743	OG	SER	A	213	71.118	5.490	34.279	1.00	49.65
ATOM	744	N	SER	A	214	70.807	4.181	36.784	1.00	43.39
ATOM	745	CA	SER	A	214	70.345	4.815	37.992	1.00	47.24
ATOM	746	C	SER	A	214	70.393	6.318	37.813	1.00	47.25
ATOM	747	O	SER	A	214	69.533	7.044	38.292	1.00	53.48
ATOM	748	CB	SER	A	214	71.235	4.418	39.149	1.00	51.53
ATOM	749	OG	SER	A	214	72.371	5.260	39.164	1.00	61.43
ATOM	750	N	ALA	A	215	71.423	6.784	37.138	1.00	42.96
ATOM	751	CA	ALA	A	215	71.587	8.193	36.892	1.00	41.39
ATOM	752	C	ALA	A	215	70.330	9.064	37.058	1.00	42.51
ATOM	753	O	ALA	A	215	69.427	9.032	36.223	1.00	41.61
ATOM	754	CB	ALA	A	215	72.130	8.359	35.528	1.00	42.71
ATOM	755	N	LYS	A	216	70.277	9.839	38.139	1.00	43.23
ATOM	756	CA	LYS	A	216	69.157	10.746	38.381	1.00	42.92
ATOM	757	C	LYS	A	216	69.425	12.083	37.669	1.00	44.03
ATOM	758	O	LYS	A	216	70.567	12.530	37.554	1.00	46.77
ATOM	759	CB	LYS	A	216	68.986	10.994	39.868	1.00	41.98
ATOM	760	CG	LYS	A	216	68.336	9.825	40.583	1.00	52.79
ATOM	761	CD	LYS	A	216	66.811	9.762	40.362	1.00	59.63
ATOM	762	CE	LYS	A	216	66.118	8.790	41.356	1.00	61.77
ATOM	763	NZ	LYS	A	216	64.754	8.345	40.904	1.00	62.46
ATOM	764	N	PRO	A	217	68.373	12.726	37.151	1.00	42.57
ATOM	765	CA	PRO	A	217	66.972	12.292	37.188	1.00	40.65
ATOM	766	C	PRO	A	217	66.836	11.055	36.339	1.00	38.18
ATOM	767	O	PRO	A	217	66.100	10.120	36.679	1.00	41.27
ATOM	768	CB	PRO	A	217	66.229	13.452	36.581	1.00	40.75
ATOM	769	CG	PRO	A	217	67.222	14.038	35.659	1.00	43.54
ATOM	770	CD	PRO	A	217	68.525	13.968	36.388	1.00	40.51
ATOM	771	N	CYS	A	218	67.566	11.057	35.233	1.00	31.05
ATOM	772	CA	CYS	A	218	67.564	9.916	34.349	1.00	26.78
ATOM	773	C	CYS	A	218	68.913	9.859	33.733	1.00	22.86
ATOM	774	O	CYS	A	218	69.574	10.873	33.679	1.00	29.03
ATOM	775	CB	CYS	A	218	66.542	10.066	33.249	1.00	25.98
ATOM	776	SG	CYS	A	218	66.873	11.481	32.185	1.00	26.84
ATOM	777	N	GLY	A	219	69.316	8.672	33.290	1.00	19.28
ATOM	778	CA	GLY	A	219	70.596	8.475	32.641	1.00	15.75

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ATOM	779	C	GLY	A	219	70.358	8.016	31.216	1.00	14.36
ATOM	780	O	GLY	A	219	69.695	6.996	30.999	1.00	16.88
ATOM	781	N	GLN	A	220	70.910	8.731	30.239	1.00	8.40
ATOM	782	CA	GLN	A	220	70.691	8.340	28.859	1.00	6.58
ATOM	783	C	GLN	A	220	71.416	7.027	28.528	1.00	6.24
ATOM	784	O	GLN	A	220	72.322	6.596	29.228	1.00	5.90
ATOM	785	CB	GLN	A	220	71.190	9.422	27.904	1.00	4.79
ATOM	786	CG	GLN	A	220	70.269	10.547	27.649	1.00	2.65
ATOM	787	CD	GLN	A	220	70.958	11.710	26.935	1.00	6.68
ATOM	788	OE1	GLN	A	220	71.918	12.328	27.450	1.00	7.29
ATOM	789	NE2	GLN	A	220	70.466	12.008	25.737	1.00	2.00
ATOM	790	N	GLN	A	221	71.006	6.399	27.442	1.00	3.22
ATOM	791	CA	GLN	A	221	71.606	5.153	26.994	1.00	6.32
ATOM	792	C	GLN	A	221	71.198	5.070	25.531	1.00	12.85
ATOM	793	O	GLN	A	221	70.070	5.458	25.173	1.00	16.65
ATOM	794	CB	GLN	A	221	70.994	3.985	27.730	1.00	2.34
ATOM	795	CG	GLN	A	221	71.630	3.637	29.018	1.00	15.69
ATOM	796	CD	GLN	A	221	71.411	2.180	29.307	1.00	30.57
ATOM	797	OE1	GLN	A	221	72.331	1.359	29.188	1.00	45.75
ATOM	798	NE2	GLN	A	221	70.181	1.831	29.671	1.00	34.58
ATOM	799	N	SER	A	222	72.077	4.588	24.666	1.00	10.31
ATOM	800	CA	SER	A	222	71.671	4.534	23.292	1.00	8.96
ATOM	801	C	SER	A	222	71.393	3.138	22.803	1.00	9.06
ATOM	802	O	SER	A	222	71.775	2.182	23.443	1.00	9.90
ATOM	803	CB	SER	A	222	72.726	5.209	22.461	1.00	15.62
ATOM	804	OG	SER	A	222	72.416	6.582	22.341	1.00	15.70
ATOM	805	N	ILE	A	223	70.735	3.027	21.652	1.00	7.52
ATOM	806	CA	ILE	A	223	70.383	1.744	21.079	1.00	7.22
ATOM	807	C	ILE	A	223	70.503	1.841	19.557	1.00	13.85
ATOM	808	O	ILE	A	223	70.163	2.888	18.987	1.00	14.97
ATOM	809	CB	ILE	A	223	68.966	1.420	21.436	1.00	8.39
ATOM	810	CG1	ILE	A	223	68.968	0.332	22.482	1.00	13.96
ATOM	811	CG2	ILE	A	223	68.176	0.985	20.201	1.00	8.10
ATOM	812	CD1	ILE	A	223	67.612	0.075	23.017	1.00	25.01
ATOM	813	N	HIS	A	224	70.947	0.755	18.897	1.00	12.32
ATOM	814	CA	HIS	A	224	71.119	0.770	17.444	1.00	7.06
ATOM	815	C	HIS	A	224	70.790	-0.538	16.735	1.00	5.86
ATOM	816	O	HIS	A	224	71.252	-1.569	17.151	1.00	13.21
ATOM	817	CB	HIS	A	224	72.564	1.151	17.135	1.00	6.77
ATOM	818	CG	HIS	A	224	72.802	1.488	15.698	1.00	9.76
ATOM	819	ND1	HIS	A	224	72.962	2.790	15.248	1.00	2.05
ATOM	820	CD2	HIS	A	224	72.835	0.700	14.597	1.00	8.16
ATOM	821	CE1	HIS	A	224	73.071	2.781	13.933	1.00	9.42
ATOM	822	NE2	HIS	A	224	73.004	1.528	13.513	1.00	11.93
ATOM	823	N	LEU	A	225	69.975	-0.530	15.688	1.00	4.75
ATOM	824	CA	LEU	A	225	69.686	-1.790	14.969	1.00	8.42
ATOM	825	C	LEU	A	225	69.525	-1.649	13.425	1.00	8.16
ATOM	826	O	LEU	A	225	68.707	-0.868	12.875	1.00	10.95
ATOM	827	CB	LEU	A	225	68.439	-2.516	-15.571	1.00	10.12
ATOM	828	CG	LEU	A	225	67.537	-1.611	16.444	1.00	18.59
ATOM	829	CD1	LEU	A	225	66.239	-1.230	15.740	1.00	20.61
ATOM	830	CD2	LEU	A	225	67.212	-2.301	17.758	1.00	17.63
ATOM	831	N	GLY	A	226	70.324	-2.429	12.719	1.00	2.48
ATOM	832	CA	GLY	A	226	70.250	-2.404	11.280	1.00	2.00
ATOM	833	C	GLY	A	226	69.937	-3.805	10.828	1.00	3.77
ATOM	834	O	GLY	A	226	69.406	-4.570	11.594	1.00	13.21
ATOM	835	N	GLY	A	227	70.332	-4.187	9.633	1.00	4.16
ATOM	836	CA	GLY	A	227	70.019	-5.516	9.175	1.00	2.00
ATOM	837	C	GLY	A	227	69.469	-5.347	7.789	1.00	4.27
ATOM	838	O	GLY	A	227	68.763	-4.371	7.545	1.00	10.21

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ATOM	839	N	VAL	A	228	69.856	-6.215	6.861	1.00	4.02
ATOM	840	CA	VAL	A	228	69.331	-6.151	5.508	1.00	8.39
ATOM	841	C	VAL	A	228	68.095	-7.026	5.406	1.00	12.75
ATOM	842	O	VAL	A	228	68.090	-8.180	5.863	1.00	14.80
ATOM	843	CB	VAL	A	228	70.349	-6.687	4.460	1.00	7.10
ATOM	844	CG1	VAL	A	228	69.659	-7.059	3.099	1.00	2.00
ATOM	845	CG2	VAL	A	228	71.349	-5.639	4.208	1.00	8.40
ATOM	846	N	PHE	A	229	67.067	-6.501	4.747	1.00	10.45
ATOM	847	CA	PHE	A	229	65.858	-7.262	4.570	1.00	6.28
ATOM	848	C	PHE	A	229	65.346	-7.062	3.180	1.00	6.59
ATOM	849	O	PHE	A	229	65.688	-6.093	2.524	1.00	5.88
ATOM	850	CB	PHE	A	229	64.799	-6.799	5.556	1.00	4.02
ATOM	851	CG	PHE	A	229	65.213	-6.947	6.981	1.00	2.00
ATOM	852	CD1	PHE	A	229	65.123	-8.169	7.628	1.00	2.00
ATOM	853	CD2	PHE	A	229	65.738	-5.883	7.666	1.00	2.00
ATOM	854	CE1	PHE	A	229	65.554	-8.320	8.932	1.00	2.00
ATOM	855	CE2	PHE	A	229	66.176	-6.037	8.988	1.00	2.82
ATOM	856	CZ	PHE	A	229	66.077	-7.261	9.604	1.00	2.00
ATOM	857	N	GLU	A	230	64.490	-7.978	2.753	1.00	11.80
ATOM	858	CA	GLU	A	230	63.837	-7.910	1.452	1.00	13.36
ATOM	859	C	GLU	A	230	62.368	-7.482	1.770	1.00	14.48
ATOM	860	O	GLU	A	230	61.665	-8.130	2.579	1.00	10.96
ATOM	861	CB	GLU	A	230	63.860	-9.280	0.816	1.00	16.74
ATOM	862	CG	GLU	A	230	63.290	-9.318	-0.548	1.00	27.61
ATOM	863	CD	GLU	A	230	64.073	-10.261	-1.441	1.00	35.38
ATOM	864	OE1	GLU	A	230	64.070	-10.034	-2.674	1.00	41.54
ATOM	865	OE2	GLU	A	230	64.697	-11.222	-0.916	1.00	32.58
ATOM	866	N	LEU	A	231	61.932	-6.370	1.178	1.00	9.09
ATOM	867	CA	LEU	A	231	60.600	-5.864	1.391	1.00	4.80
ATOM	868	C	LEU	A	231	59.713	-6.131	0.161	1.00	10.24
ATOM	869	O	LEU	A	231	60.172	-6.150	-0.995	1.00	7.89
ATOM	870	CB	LEU	A	231	60.675	-4.380	1.744	1.00	2.00
ATOM	871	CG	LEU	A	231	61.616	-4.131	2.925	1.00	2.00
ATOM	872	CD1	LEU	A	231	61.590	-2.674	3.343	1.00	2.00
ATOM	873	CD2	LEU	A	231	61.265	-5.003	4.067	1.00	2.00
ATOM	874	N	GLN	A	232	58.442	-6.422	0.433	1.00	13.69
ATOM	875	CA	GLN	A	232	57.479	-6.652	-0.625	1.00	9.36
ATOM	876	C	GLN	A	232	57.013	-5.267	-1.029	1.00	3.90
ATOM	877	O	GLN	A	232	56.990	-4.341	-0.224	1.00	2.00
ATOM	878	CB	GLN	A	232	56.346	-7.483	-0.081	1.00	19.91
ATOM	879	CG	GLN	A	232	56.628	-8.947	-0.167	1.00	32.45
ATOM	880	CD	GLN	A	232	56.867	-9.343	-1.593	1.00	42.33
ATOM	881	OE1	GLN	A	232	55.978	-9.217	-2.448	1.00	50.57
ATOM	882	NE2	GLN	A	232	58.081	-9.797	-1.881	1.00	50.87
ATOM	883	N	PRO	A	233	56.562	-5.106	-2.255	1.00	2.20
ATOM	884	CA	PRO	A	233	56.151	-3.738	-2.591	1.00	5.00
ATOM	885	C	PRO	A	233	54.990	-3.336	-1.743	1.00	10.61
ATOM	886	O	PRO	A	233	54.036	-4.093	-1.643	1.00	20.91
ATOM	887	CB	PRO	A	233	55.792	-3.797	-4.065	1.00	2.00
ATOM	888	CG	PRO	A	233	55.514	-5.206	-4.331	1.00	3.25
ATOM	889	CD	PRO	A	233	56.265	-6.072	-3.310	1.00	3.06
ATOM	890	N	GLY	A	234	55.063	-2.165	-1.118	1.00	10.44
ATOM	891	CA	GLY	A	234	53.966	-1.728	-0.282	1.00	8.91
ATOM	892	C	GLY	A	234	54.322	-1.984	1.160	1.00	7.37
ATOM	893	O	GLY	A	234	53.594	-1.630	2.074	1.00	12.50
ATOM	894	N	ALA	A	235	55.466	-2.607	1.365	1.00	7.79
ATOM	895	CA	ALA	A	235	55.970	-2.878	2.709	1.00	7.87
ATOM	896	C	ALA	A	235	56.114	-1.589	3.528	1.00	7.90
ATOM	897	O	ALA	A	235	56.274	-0.479	2.983	1.00	11.97
ATOM	898	CB	ALA	A	235	57.294	-3.536	2.594	1.00	11.88

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ATOM	899	N	SER A 236	56.068	-1.708	4.840	1.00	2.00
ATOM	900	CA	SER A 236	56.188	-0.494	5.609	1.00	3.52
ATOM	901	C	SER A 236	56.703	-0.779	7.002	1.00	2.05
ATOM	902	O	SER A 236	56.289	-1.739	7.637	1.00	2.00
ATOM	903	CB	SER A 236	54.841	0.187	5.616	1.00	2.00
ATOM	904	OG	SER A 236	54.428	0.440	6.934	1.00	14.87
ATOM	905	N	VAL A 237	57.667	0.014	7.451	1.00	3.00
ATOM	906	CA	VAL A 237	58.262	-0.240	8.751	1.00	6.23
ATOM	907	C	VAL A 237	58.111	0.851	9.824	1.00	2.00
ATOM	908	O	VAL A 237	58.030	2.039	9.517	1.00	2.00
ATOM	909	CB	VAL A 237	59.823	-0.631	8.563	1.00	8.48
ATOM	910	CG1	VAL A 237	59.993	-1.945	7.823	1.00	4.04
ATOM	911	CG2	VAL A 237	60.546	0.387	7.741	1.00	2.00
ATOM	912	N	PHE A 238	58.139	0.410	11.078	1.00	2.00
ATOM	913	CA	PHE A 238	57.984	1.306	12.184	1.00	3.08
ATOM	914	C	PHE A 238	58.783	0.914	13.443	1.00	7.14
ATOM	915	O	PHE A 238	58.971	-0.263	13.750	1.00	4.30
ATOM	916	CB	PHE A 238	56.464	1.495	12.480	1.00	4.24
ATOM	917	CG	PHE A 238	55.723	0.217	12.931	1.00	2.00
ATOM	918	CD1	PHE A 238	55.319	-0.740	12.018	1.00	2.00
ATOM	919	CD2	PHE A 238	55.563	-0.069	14.275	1.00	2.00
ATOM	920	CE1	PHE A 238	54.803	-1.950	12.434	1.00	2.00
ATOM	921	CE2	PHE A 238	55.047	-1.276	14.675	1.00	2.00
ATOM	922	CZ	PHE A 238	54.674	-2.214	13.755	1.00	2.00
ATOM	923	N	VAL A 239	59.298	1.913	14.152	1.00	11.30
ATOM	924	CA	VAL A 239	60.061	1.636	15.377	1.00	13.70
ATOM	925	C	VAL A 239	59.073	1.714	16.509	1.00	16.17
ATOM	926	O	VAL A 239	58.295	2.659	16.600	1.00	21.94
ATOM	927	CB	VAL A 239	61.149	2.713	15.677	1.00	11.18
ATOM	928	CG1	VAL A 239	61.917	2.349	16.956	1.00	4.11
ATOM	929	CG2	VAL A 239	62.056	2.907	14.464	1.00	8.49
ATOM	930	N	ASN A 240	59.178	0.781	17.427	1.00	15.86
ATOM	931	CA	ASN A 240	58.250	0.739	18.527	1.00	13.15
ATOM	932	C	ASN A 240	59.017	0.533	19.812	1.00	9.12
ATOM	933	O	ASN A 240	59.898	-0.305	19.861	1.00	15.07
ATOM	934	CB	ASN A 240	57.321	-0.434	18.292	1.00	20.23
ATOM	935	CG	ASN A 240	56.321	-0.584	19.365	1.00	27.67
ATOM	936	OD1	ASN A 240	56.088	0.344	20.129	1.00	34.70
ATOM	937	ND2	ASN A 240	55.693	-1.749	19.430	1.00	30.54
ATOM	938	N	VAL A 241	58.720	1.276	20.857	1.00	3.35
ATOM	939	CA	VAL A 241	59.449	1.027	22.082	1.00	7.00
ATOM	940	C	VAL A 241	58.534	0.815	23.280	1.00	5.64
ATOM	941	O	VAL A 241	57.335	0.984	23.194	1.00	2.00
ATOM	942	CB	VAL A 241	60.477	2.130	22.387	1.00	9.53
ATOM	943	CG1	VAL A 241	61.106	2.597	21.085	1.00	12.66
ATOM	944	CG2	VAL A 241	59.825	3.286	23.137	1.00	12.35
ATOM	945	N	THR A 242	59.127	0.435	24.401	1.00	6.63
ATOM	946	CA	THR A 242	58.374	0.174	25.601	1.00	8.10
ATOM	947	C	THR A 242	57.847	1.467	26.253	1.00	9.07
ATOM	948	O	THR A 242	56.719	1.503	26.739	1.00	17.39
ATOM	949	CB	THR A 242	59.231	-0.626	26.595	1.00	9.04
ATOM	950	OG1	THR A 242	59.474	0.161	27.771	1.00	18.15
ATOM	951	CG2	THR A 242	60.536	-0.974	25.980	1.00	6.73
ATOM	952	N	ASP A 243	58.624	2.531	26.288	1.00	2.00
ATOM	953	CA	ASP A 243	58.101	3.743	26.885	1.00	3.84
ATOM	954	C	ASP A 243	58.568	5.002	26.179	1.00	8.51
ATOM	955	O	ASP A 243	59.549	5.656	26.594	1.00	12.75
ATOM	956	CB	ASP A 243	58.474	3.864	28.356	1.00	8.09
ATOM	957	CG	ASP A 243	57.922	5.196	28.991	1.00	17.73
ATOM	958	OD1	ASP A 243	58.236	5.516	30.171	1.00	18.38

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ATOM	959	OD2	ASP	A	243	57.158	5.938	28.300	1.00	16.69
ATOM	960	N	PRO	A	244	57.854	5.403	25.121	1.00	5.76
ATOM	961	CA	PRO	A	244	58.295	6.604	24.425	1.00	2.00
ATOM	962	C	PRO	A	244	58.375	7.772	25.283	1.00	4.42
ATOM	963	O	PRO	A	244	59.087	8.684	24.954	1.00	14.29
ATOM	964	CB	PRO	A	244	57.255	6.849	23.384	1.00	3.20
ATOM	965	CG	PRO	A	244	56.089	6.012	23.816	1.00	8.68
ATOM	966	CD	PRO	A	244	56.655	4.832	24.505	1.00	6.08
ATOM	967	N	SER	A	245	57.612	7.796	26.363	1.00	9.76
ATOM	968	CA	SER	A	245	57.660	8.956	27.248	1.00	9.87
ATOM	969	C	SER	A	245	59.080	9.244	27.653	1.00	11.09
ATOM	970	O	SER	A	245	59.343	10.198	28.384	1.00	16.14
ATOM	971	CB	SER	A	245	56.870	8.732	28.523	1.00	8.21
ATOM	972	OG	SER	A	245	57.715	8.102	29.480	1.00	12.78
ATOM	973	N	GLN	A	246	60.018	8.424	27.214	1.00	11.55
ATOM	974	CA	GLN	A	246	61.358	8.723	27.632	1.00	12.18
ATOM	975	C	GLN	A	246	62.474	8.516	26.660	1.00	4.66
ATOM	976	O	GLN	A	246	63.621	8.495	27.068	1.00	3.71
ATOM	977	CB	GLN	A	246	61.655	7.990	28.928	1.00	19.05
ATOM	978	CG	GLN	A	246	61.598	6.493	28.838	1.00	23.88
ATOM	979	CD	GLN	A	246	61.327	5.921	30.199	1.00	30.72
ATOM	980	OE1	GLN	A	246	61.639	4.759	30.479	1.00	30.05
ATOM	981	NE2	GLN	A	246	60.739	6.754	31.074	1.00	32.48
ATOM	982	N	VAL	A	247	62.158	8.376	25.383	1.00	2.17
ATOM	983	CA	VAL	A	247	63.223	8.218	24.415	1.00	6.49
ATOM	984	C	VAL	A	247	63.733	9.657	24.405	1.00	9.51
ATOM	985	O	VAL	A	247	62.991	10.524	24.839	1.00	7.87
ATOM	986	CB	VAL	A	247	62.734	7.803	22.989	1.00	6.19
ATOM	987	CG1	VAL	A	247	61.276	7.420	22.978	1.00	4.52
ATOM	988	CG2	VAL	A	247	63.003	8.917	22.029	1.00	7.05
ATOM	989	N	SER	A	248	64.996	9.881	23.992	1.00	11.85
ATOM	990	CA	SER	A	248	65.614	11.211	23.941	1.00	9.62
ATOM	991	C	SER	A	248	65.463	11.818	22.564	1.00	5.31
ATOM	992	O	SER	A	248	65.582	11.098	21.570	1.00	4.91
ATOM	993	CB	SER	A	248	67.087	11.107	24.315	1.00	9.24
ATOM	994	OG	SER	A	248	67.223	11.172	25.721	1.00	16.76
ATOM	995	N	HIS	A	249	65.168	13.118	22.510	1.00	2.00
ATOM	996	CA	HIS	A	249	64.971	13.811	21.242	1.00	2.00
ATOM	997	C	HIS	A	249	65.949	14.966	20.974	1.00	7.78
ATOM	998	O	HIS	A	249	65.828	15.661	19.958	1.00	8.73
ATOM	999	CB	HIS	A	249	63.587	14.386	21.172	1.00	2.00
ATOM	1000	CG	HIS	A	249	62.516	13.369	21.115	1.00	2.00
ATOM	1001	ND1	HIS	A	249	62.124	12.776	19.940	1.00	7.60
ATOM	1002	CD2	HIS	A	249	61.703	12.876	22.074	1.00	2.00
ATOM	1003	CE1	HIS	A	249	61.113	11.962	20.165	1.00	2.00
ATOM	1004	NE2	HIS	A	249	60.836	12.009	21.455	1.00	9.29
ATOM	1005	N	GLY	A	250	66.891	15.219	21.880	1.00	8.42
ATOM	1006	CA	GLY	A	250	67.860	16.262	21.587	1.00	8.13
ATOM	1007	C	GLY	A	250	68.408	15.969	20.180	1.00	11.58
ATOM	1008	O	GLY	A	250	68.440	14.798	19.718	1.00	12.84
ATOM	1009	N	THR	A	251	68.859	17.013	19.489	1.00	9.58
ATOM	1010	CA	THR	A	251	69.321	16.844	18.122	1.00	6.02
ATOM	1011	C	THR	A	251	70.340	15.732	17.985	1.00	4.99
ATOM	1012	O	THR	A	251	71.222	15.569	18.831	1.00	8.64
ATOM	1013	CB	THR	A	251	69.913	18.136	17.559	1.00	7.15
ATOM	1014	OG1	THR	A	251	71.165	17.821	16.945	1.00	10.44
ATOM	1015	CG2	THR	A	251	70.133	19.177	18.662	1.00	7.76
ATOM	1016	N	GLY	A	252	70.190	14.933	16.944	1.00	2.00
ATOM	1017	CA	GLY	A	252	71.136	13.859	16.742	1.00	8.54
ATOM	1018	C	GLY	A	252	70.971	12.555	17.533	1.00	15.63

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ATOM	1019	O	GLY A 252	71.576	11.514	17.199	1.00	17.21
ATOM	1020	N	PHE A 253	70.116	12.555	18.547	1.00	17.58
ATOM	1021	CA	PHE A 253	69.965	11.356	19.337	1.00	14.67
ATOM	1022	C	PHE A 253	69.169	10.196	18.741	1.00	18.52
ATOM	1023	O	PHE A 253	69.731	9.114	18.548	1.00	24.79
ATOM	1024	CB	PHE A 253	69.397	11.745	20.652	1.00	9.29
ATOM	1025	CG	PHE A 253	70.413	12.208	21.601	1.00	6.53
ATOM	1026	CD1	PHE A 253	71.356	11.309	22.103	1.00	4.13
ATOM	1027	CD2	PHE A 253	70.397	13.523	22.049	1.00	2.00
ATOM	1028	CE1	PHE A 253	72.258	11.722	23.052	1.00	2.00
ATOM	1029	CE2	PHE A 253	71.277	13.948	22.982	1.00	2.00
ATOM	1030	CZ	PHE A 253	72.213	13.058	23.497	1.00	2.00
ATOM	1031	N	THR A 254	67.882	10.403	18.444	1.00	15.29
ATOM	1032	CA	THR A 254	67.042	9.325	17.906	1.00	10.64
ATOM	1033	C	THR A 254	66.683	9.494	16.426	1.00	10.93
ATOM	1034	O	THR A 254	66.119	10.510	16.041	1.00	12.71
ATOM	1035	CB	THR A 254	65.734	9.181	18.738	1.00	6.30
ATOM	1036	OG1	THR A 254	66.041	8.772	20.085	1.00	2.00
ATOM	1037	CG2	THR A 254	64.835	8.163	18.092	1.00	7.22
ATOM	1038	N	SER A 255	67.036	8.511	15.590	1.00	6.32
ATOM	1039	CA	SER A 255	66.745	8.603	14.166	1.00	2.00
ATOM	1040	C	SER A 255	66.302	7.270	13.681	1.00	2.00
ATOM	1041	O	SER A 255	66.443	6.287	14.409	1.00	2.00
ATOM	1042	CB	SER A 255	67.985	9.039	13.402	1.00	10.45
ATOM	1043	OG	SER A 255	69.171	8.696	14.098	1.00	17.86
ATOM	1044	N	PHE A 256	65.831	7.217	12.439	1.00	2.00
ATOM	1045	CA	PHE A 256	65.282	5.975	11.889	1.00	3.04
ATOM	1046	C	PHE A 256	65.428	6.126	10.386	1.00	5.89
ATOM	1047	O	PHE A 256	65.341	7.259	9.875	1.00	6.10
ATOM	1048	CB	PHE A 256	63.797	5.918	12.354	1.00	2.97
ATOM	1049	CG	PHE A 256	62.909	4.932	11.624	1.00	3.04
ATOM	1050	CD1	PHE A 256	63.320	3.641	11.339	1.00	9.10
ATOM	1051	CD2	PHE A 256	61.617	5.280	11.269	1.00	3.21
ATOM	1052	CE1	PHE A 256	62.440	2.702	10.704	1.00	4.41
ATOM	1053	CE2	PHE A 256	60.743	4.336	10.631	1.00	2.00
ATOM	1054	CZ	PHE A 256	61.164	3.060	10.358	1.00	2.00
ATOM	1055	N	GLY A 257	65.668	5.028	9.668	1.00	2.00
ATOM	1056	CA	GLY A 257	65.817	5.161	8.224	1.00	3.03
ATOM	1057	C	GLY A 257	66.164	3.926	7.416	1.00	5.43
ATOM	1058	O	GLY A 257	66.520	2.891	7.990	1.00	9.17
ATOM	1059	N	LEU A 258	66.072	4.014	6.087	1.00	2.00
ATOM	1060	CA	LEU A 258	66.382	2.848	5.269	1.00	6.41
ATOM	1061	C	LEU A 258	66.915	3.273	3.903	1.00	11.93
ATOM	1062	O	LEU A 258	66.630	4.382	3.416	1.00	15.24
ATOM	1063	CB	LEU A 258	65.138	1.950	5.087	1.00	4.06
ATOM	1064	CG	LEU A 258	63.959	2.698	4.410	1.00	7.29
ATOM	1065	CD1	LEU A 258	64.054	2.709	2.816	1.00	2.02
ATOM	1066	CD2	LEU A 258	62.656	2.080	4.878	1.00	2.00
ATOM	1067	N	LEU A 259	67.734	2.401	3.312	1.00	11.56
ATOM	1068	CA	LEU A 259	68.298	2.650	1.991	1.00	11.19
ATOM	1069	C	LEU A 259	68.212	1.356	1.221	1.00	11.36
ATOM	1070	O	LEU A 259	68.440	0.266	1.744	1.00	14.62
ATOM	1071	CB	LEU A 259	69.771	3.070	2.088	1.00	12.90
ATOM	1072	CG	LEU A 259	70.630	1.982	2.737	1.00	10.06
ATOM	1073	CD1	LEU A 259	71.405	1.289	1.637	1.00	6.22
ATOM	1074	CD2	LEU A 259	71.528	2.546	3.837	1.00	2.00
ATOM	1075	N	LYS A 260	67.886	1.491	-0.042	1.00	10.51
ATOM	1076	CA	LYS A 260	67.750	0.351	-0.905	1.00	10.49
ATOM	1077	C	LYS A 260	69.058	0.099	-1.682	1.00	12.93
ATOM	1078	O	LYS A 260	69.685	1.041	-2.179	1.00	16.07



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ATOM	1079	CB	LYS	A	260	66.566	0.636	-1.853	1.00	5.98
ATOM	1080	CG	LYS	A	260	66.336	-0.387	-2.920	1.00	2.00
ATOM	1081	CD	LYS	A	260	64.986	-0.220	-3.516	1.00	2.93
ATOM	1082	CE	LYS	A	260	64.774	-1.349	-4.484	1.00	13.84
ATOM	1083	NZ	LYS	A	260	65.818	-1.218	-5.562	1.00	26.50
ATOM	1084	N	LEU	A	261	69.439	-1.169	-1.813	1.00	11.66
ATOM	1085	CA	LEU	A	261	70.639	-1.572	-2.548	1.00	11.19
ATOM	1086	C	LEU	A	261	70.370	-1.714	-4.050	1.00	17.53
ATOM	1087	O	LEU	A	261	69.302	-2.284	-4.382	1.00	18.86
ATOM	1088	CB	LEU	A	261	71.116	-2.911	-2.039	1.00	6.96
ATOM	1089	CG	LEU	A	261	70.715	-3.118	-0.592	1.00	10.40
ATOM	1090	CD1	LEU	A	261	71.467	-4.327	0.009	1.00	13.14
ATOM	1091	CD2	LEU	A	261	70.984	-1.805	0.188	1.00	8.72
ATOM	1092	OT	LEU	A	261	71.223	-1.294	-4.882	1.00	23.28
ATOM	1093	N	ASN	B	119	80.278	2.961	-10.613	0.00	33.41
ATOM	1094	CA	ASN	B	119	81.386	1.997	-10.875	0.00	31.54
ATOM	1095	C	ASN	B	119	82.479	2.094	-9.815	0.00	25.43
ATOM	1096	O	ASN	B	119	82.905	1.075	-9.262	0.00	26.65
ATOM	1097	CB	ASN	B	119	81.986	2.245	-12.261	0.00	39.42
ATOM	1098	CG	ASN	B	119	82.303	0.958	-12.997	0.00	45.19
ATOM	1099	OD1	ASN	B	119	83.448	0.510	-13.021	0.00	49.11
ATOM	1100	ND2	ASN	B	119	81.284	0.356	-13.602	0.00	49.11
ATOM	1101	N	PRO	B	120	82.957	3.318	-9.525	1.00	15.87
ATOM	1102	CA	PRO	B	120	84.009	3.443	-8.506	1.00	11.66
ATOM	1103	C	PRO	B	120	83.420	3.385	-7.136	1.00	6.70
ATOM	1104	O	PRO	B	120	82.688	4.277	-6.742	1.00	12.39
ATOM	1105	CB	PRO	B	120	84.646	4.824	-8.761	1.00	2.00
ATOM	1106	CG	PRO	B	120	83.561	5.624	-9.374	1.00	9.66
ATOM	1107	CD	PRO	B	120	82.600	4.626	-10.104	1.00	13.67
ATOM	1108	N	GLN	B	121	83.735	2.370	-6.370	1.00	2.36
ATOM	1109	CA	GLN	B	121	83.191	2.349	-5.026	1.00	7.90
ATOM	1110	C	GLN	B	121	83.906	3.329	-4.080	1.00	10.45
ATOM	1111	O	GLN	B	121	85.134	3.302	-3.981	1.00	14.69
ATOM	1112	CB	GLN	B	121	83.277	0.939	-4.504	1.00	7.85
ATOM	1113	CG	GLN	B	121	82.934	-0.018	-5.615	1.00	23.34
ATOM	1114	CD	GLN	B	121	81.672	-0.796	-5.357	1.00	32.30
ATOM	1115	OE1	GLN	B	121	80.582	-0.230	-5.260	1.00	43.28
ATOM	1116	NE2	GLN	B	121	81.807	-2.108	-5.241	1.00	37.73
ATOM	1117	N	ILE	B	122	83.152	4.179	-3.374	1.00	5.13
ATOM	1118	CA	ILE	B	122	83.772	5.114	-2.444	1.00	2.00
ATOM	1119	C	ILE	B	122	83.447	4.665	-1.046	1.00	2.00
ATOM	1120	O	ILE	B	122	82.326	4.668	-0.678	1.00	9.59
ATOM	1121	CB	ILE	B	122	83.275	6.514	-2.617	1.00	2.00
ATOM	1122	CG1	ILE	B	122	83.925	7.105	-3.858	1.00	3.72
ATOM	1123	CG2	ILE	B	122	83.758	7.360	-1.457	1.00	2.00
ATOM	1124	CD1	ILE	B	122	83.054	7.378	-4.949	1.00	2.00
ATOM	1125	N	ALA	B	123	84.408	4.248	-0.255	1.00	3.58
ATOM	1126	CA	ALA	B	123	84.112	3.777	1.095	1.00	3.42
ATOM	1127	C	ALA	B	123	85.326	3.983	1.961	1.00	7.86
ATOM	1128	O	ALA	B	123	86.428	4.212	1.454	1.00	11.59
ATOM	1129	CB	ALA	B	123	83.780	2.347	1.066	1.00	2.21
ATOM	1130	N	ALA	B	124	85.148	3.898	3.267	1.00	4.01
ATOM	1131	CA	ALA	B	124	86.279	4.149	4.108	1.00	2.67
ATOM	1132	C	ALA	B	124	86.089	3.689	5.525	1.00	5.48
ATOM	1133	O	ALA	B	124	85.164	4.108	6.200	1.00	10.04
ATOM	1134	CB	ALA	B	124	86.573	5.649	4.077	1.00	2.00
ATOM	1135	N	HIS	B	125	86.979	2.824	5.985	1.00	6.53
ATOM	1136	CA	HIS	B	125	86.914	2.359	7.354	1.00	3.79
ATOM	1137	C	HIS	B	125	88.247	2.747	7.953	1.00	2.00
ATOM	1138	O	HIS	B	125	89.262	2.335	7.479	1.00	2.00

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ATOM	1139	CB	HIS	B	125	86.723	0.851	7.401	1.00	2.00
ATOM	1140	CG	HIS	B	125	86.374	0.349	8.761	1.00	2.00
ATOM	1141	ND1	HIS	B	125	85.162	0.600	9.348	1.00	2.40
ATOM	1142	CD2	HIS	B	125	87.109	-0.302	9.686	1.00	7.74
ATOM	1143	CE1	HIS	B	125	85.157	0.127	10.581	1.00	3.81
ATOM	1144	NE2	HIS	B	125	86.333	-0.423	10.816	1.00	2.00
ATOM	1145	N	VAL	B	126	88.258	3.559	8.988	1.00	2.11
ATOM	1146	CA	VAL	B	126	89.525	3.973	9.582	1.00	5.25
ATOM	1147	C	VAL	B	126	89.572	3.561	11.050	1.00	5.37
ATOM	1148	O	VAL	B	126	88.567	3.545	11.721	1.00	8.41
ATOM	1149	CB	VAL	B	126	89.735	5.499	9.497	1.00	4.54
ATOM	1150	CG1	VAL	B	126	89.840	5.973	8.033	1.00	2.00
ATOM	1151	CG2	VAL	B	126	88.627	6.183	10.236	1.00	3.18
ATOM	1152	N	ILE	B	127	90.761	3.289	11.557	1.00	4.63
ATOM	1153	CA	ILE	B	127	90.930	2.815	12.902	1.00	2.00
ATOM	1154	C	ILE	B	127	91.208	3.886	13.928	1.00	2.46
ATOM	1155	O	ILE	B	127	91.911	4.830	13.661	1.00	2.15
ATOM	1156	CB	ILE	B	127	92.057	1.855	12.924	1.00	2.00
ATOM	1157	CG1	ILE	B	127	91.651	0.563	12.216	1.00	2.00
ATOM	1158	CG2	ILE	B	127	92.443	1.579	14.355	1.00	11.26
ATOM	1159	CD1	ILE	B	127	90.776	0.747	11.001	1.00	2.00
ATOM	1160	N	SER	B	128	90.668	3.713	15.125	1.00	6.96
ATOM	1161	CA	SER	B	128	90.836	4.679	16.199	1.00	6.32
ATOM	1162	C	SER	B	128	92.278	4.822	16.496	1.00	6.97
ATOM	1163	O	SER	B	128	93.017	3.850	16.374	1.00	10.18
ATOM	1164	CB	SER	B	128	90.140	4.205	17.466	1.00	7.02
ATOM	1165	OG	SER	B	128	90.942	3.306	18.206	1.00	2.48
ATOM	1166	N	GLU	B	129	92.657	6.032	16.902	1.00	9.98
ATOM	1167	CA	GLU	B	129	94.029	6.391	17.254	1.00	9.69
ATOM	1168	C	GLU	B	129	94.089	7.314	18.463	1.00	5.45
ATOM	1169	O	GLU	B	129	93.586	8.439	18.417	1.00	5.57
ATOM	1170	CB	GLU	B	129	94.724	7.106	16.078	1.00	13.88
ATOM	1171	CG	GLU	B	129	96.264	7.178	16.259	1.00	16.62
ATOM	1172	CD	GLU	B	129	96.998	6.141	15.430	1.00	20.65
ATOM	1173	OE1	GLU	B	129	96.690	4.940	15.553	1.00	19.99
ATOM	1174	OE2	GLU	B	129	97.885	6.528	14.640	1.00	28.20
ATOM	1175	N	ALA	B	130	94.731	6.870	19.535	1.00	2.00
ATOM	1176	CA	ALA	B	130	94.839	7.716	20.713	1.00	2.24
ATOM	1177	C	ALA	B	130	95.667	8.953	20.426	1.00	8.45
ATOM	1178	O	ALA	B	130	96.446	8.979	19.501	1.00	19.14
ATOM	1179	CB	ALA	B	130	95.452	6.959	21.823	1.00	2.00
ATOM	1180	N	SER	B	131	95.531	9.998	21.206	1.00	17.54
ATOM	1181	CA	SER	B	131	96.330	11.180	20.910	1.00	27.56
ATOM	1182	C	SER	B	131	96.422	12.148	22.078	1.00	30.71
ATOM	1183	O	SER	B	131	95.418	12.464	22.699	1.00	32.46
ATOM	1184	CB	SER	B	131	95.770	11.895	19.669	1.00	28.54
ATOM	1185	OG	SER	B	131	95.392	13.232	19.957	1.00	33.89
ATOM	1186	N	SER	B	132	97.637	12.630	22.338	1.00	37.29
ATOM	1187	CA	SER	B	132	97.941	13.551	23.445	1.00	40.98
ATOM	1188	C	SER	B	132	97.367	14.946	23.230	1.00	40.37
ATOM	1189	O	SER	B	132	97.170	15.717	24.185	1.00	34.30
ATOM	1190	CB	SER	B	132	99.461	13.632	23.622	1.00	43.17
ATOM	1191	OG	SER	B	132	100.123	12.861	22.624	1.00	45.20
ATOM	1192	N	LYS	B	133	97.100	15.244	21.961	1.00	43.16
ATOM	1193	CA	LYS	B	133	96.529	16.523	21.557	1.00	45.59
ATOM	1194	C	LYS	B	133	95.402	16.915	22.512	1.00	46.14
ATOM	1195	O	LYS	B	133	95.039	16.159	23.415	1.00	43.75
ATOM	1196	CB	LYS	B	133	95.998	16.423	20.113	1.00	43.86
ATOM	1197	CG	LYS	B	133	96.846	17.155	19.089	1.00	50.50
ATOM	1198	CD	LYS	B	133	98.336	17.119	19.474	1.00	58.01

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ATOM	1199	CE	LYS	B	133	98.760	18.329	20.322	1.00	59.35
ATOM	1200	NZ	LYS	B	133	99.366	17.939	21.638	1.00	60.61
ATOM	1201	N	THR	B	134	94.859	18.108	22.344	1.00	47.80
ATOM	1202	CA	THR	B	134	93.763	18.507	23.213	1.00	50.86
ATOM	1203	C	THR	B	134	92.518	18.857	22.420	1.00	49.91
ATOM	1204	O	THR	B	134	92.393	19.960	21.873	1.00	51.92
ATOM	1205	CB	THR	B	134	94.140	19.700	24.089	1.00	53.60
ATOM	1206	OG1	THR	B	134	95.560	19.710	24.285	1.00	58.43
ATOM	1207	CG2	THR	B	134	93.429	19.607	25.445	1.00	52.01
ATOM	1208	N	THR	B	135	91.605	17.899	22.349	1.00	45.66
ATOM	1209	CA	THR	B	135	90.356	18.093	21.637	1.00	42.36
ATOM	1210	C	THR	B	135	89.449	17.021	22.125	1.00	43.18
ATOM	1211	O	THR	B	135	89.909	16.061	22.744	1.00	47.38
ATOM	1212	CB	THR	B	135	90.457	17.864	20.123	1.00	38.55
ATOM	1213	OG1	THR	B	135	91.463	16.888	19.838	1.00	31.63
ATOM	1214	CG2	THR	B	135	90.735	19.165	19.405	1.00	38.66
ATOM	1215	N	SER	B	136	88.167	17.186	21.823	1.00	39.65
ATOM	1216	CA	SER	B	136	87.163	16.213	22.190	1.00	32.03
ATOM	1217	C	SER	B	136	86.881	15.511	20.882	1.00	28.32
ATOM	1218	O	SER	B	136	86.090	14.584	20.870	1.00	32.35
ATOM	1219	CB	SER	B	136	85.911	16.911	22.638	1.00	30.83
ATOM	1220	OG	SER	B	136	85.479	17.714	21.558	1.00	31.91
ATOM	1221	N	VAL	B	137	87.499	16.000	19.790	1.00	19.82
ATOM	1222	CA	VAL	B	137	87.368	15.432	18.430	1.00	10.08
ATOM	1223	C	VAL	B	137	88.353	14.281	18.284	1.00	5.87
ATOM	1224	O	VAL	B	137	89.535	14.469	18.458	1.00	2.53
ATOM	1225	CB	VAL	B	137	87.675	16.470	17.358	1.00	2.46
ATOM	1226	CG1	VAL	B	137	88.771	17.286	17.799	1.00	6.31
ATOM	1227	CG2	VAL	B	137	88.049	15.812	16.071	1.00	2.70
ATOM	1228	N	LEU	B	138	87.837	13.088	18.007	1.00	7.89
ATOM	1229	CA	LEU	B	138	88.644	11.889	17.922	1.00	9.18
ATOM	1230	C	LEU	B	138	89.390	11.762	16.656	1.00	13.48
ATOM	1231	O	LEU	B	138	88.839	12.091	15.594	1.00	9.84
ATOM	1232	CB	LEU	B	138	87.787	10.625	18.071	1.00	7.96
ATOM	1233	CG	LEU	B	138	86.728	10.352	19.147	1.00	6.51
ATOM	1234	CD1	LEU	B	138	85.997	9.106	18.648	1.00	9.57
ATOM	1235	CD2	LEU	B	138	87.307	10.125	20.585	1.00	2.00
ATOM	1236	N	GLN	B	139	90.613	11.205	16.815	1.00	19.59
ATOM	1237	CA	GLN	B	139	91.606	10.930	15.767	1.00	18.74
ATOM	1238	C	GLN	B	139	91.345	9.571	15.128	1.00	19.42
ATOM	1239	O	GLN	B	139	90.664	8.714	15.687	1.00	26.80
ATOM	1240	CB	GLN	B	139	93.016	10.887	16.366	1.00	23.89
ATOM	1241	CG	GLN	B	139	93.494	12.160	17.011	1.00	26.84
ATOM	1242	CD	GLN	B	139	93.987	13.105	15.980	1.00	36.67
ATOM	1243	OE1	GLN	B	139	94.947	12.804	15.243	1.00	38.80
ATOM	1244	NE2	GLN	B	139	93.334	14.260	15.889	1.00	39.18
ATOM	1245	N	TRP	B	140	91.930	9.347	13.972	1.00	17.01
ATOM	1246	CA	TRP	B	140	91.735	8.090	13.283	1.00	17.35
ATOM	1247	C	TRP	B	140	92.966	7.861	12.467	1.00	18.96
ATOM	1248	O	TRP	B	140	93.597	8.810	12.012	1.00	23.09
ATOM	1249	CB	TRP	B	140	90.525	8.169	12.361	1.00	12.43
ATOM	1250	CG	TRP	B	140	89.373	8.629	13.085	1.00	6.86
ATOM	1251	CD1	TRP	B	140	88.979	9.920	13.255	1.00	3.39
ATOM	1252	CD2	TRP	B	140	88.487	7.828	13.856	1.00	8.04
ATOM	1253	NE1	TRP	B	140	87.907	9.975	14.086	1.00	8.51
ATOM	1254	CE2	TRP	B	140	87.583	8.698	14.480	1.00	9.42
ATOM	1255	CE3	TRP	B	140	88.377	6.448	14.088	1.00	14.20
ATOM	1256	CZ2	TRP	B	140	86.573	8.246	15.325	1.00	9.80
ATOM	1257	CZ3	TRP	B	140	87.374	5.990	14.925	1.00	16.83
ATOM	1258	CH2	TRP	B	140	86.483	6.893	15.535	1.00	17.94

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ATOM	1259	N	ALA	B	141	93.304	6.595	12.278	1.00	19.24
ATOM	1260	CA	ALA	B	141	94.478	6.213	11.511	1.00	16.22
ATOM	1261	C	ALA	B	141	94.080	5.252	10.394	1.00	12.36
ATOM	1262	O	ALA	B	141	93.189	4.417	10.562	1.00	10.39
ATOM	1263	CB	ALA	B	141	95.558	5.550	12.479	1.00	11.99
ATOM	1264	N	GLU	B	142	94.757	5.380	9.264	1.00	10.28
ATOM	1265	CA	GLU	B	142	94.520	4.515	8.117	1.00	6.23
ATOM	1266	C	GLU	B	142	95.476	3.304	8.243	1.00	2.00
ATOM	1267	O	GLU	B	142	96.301	3.077	7.367	1.00	2.00
ATOM	1268	CB	GLU	B	142	94.821	5.318	6.869	1.00	2.00
ATOM	1269	CG	GLU	B	142	94.030	4.983	5.704	1.00	5.63
ATOM	1270	CD	GLU	B	142	94.353	5.927	4.568	1.00	13.42
ATOM	1271	OE1	GLU	B	142	94.122	7.144	4.796	1.00	8.81
ATOM	1272	OE2	GLU	B	142	94.837	5.449	3.482	1.00	16.34
ATOM	1273	N	LYS	B	143	95.366	2.560	9.347	1.00	2.00
ATOM	1274	CA	LYS	B	143	96.209	1.391	9.600	1.00	2.00
ATOM	1275	C	LYS	B	143	95.430	0.107	9.813	1.00	2.00
ATOM	1276	O	LYS	B	143	94.295	-0.001	9.374	1.00	2.09
ATOM	1277	CB	LYS	B	143	97.093	1.602	10.804	1.00	2.00
ATOM	1278	CG	LYS	B	143	96.429	2.327	11.879	1.00	8.90
ATOM	1279	CD	LYS	B	143	97.278	2.298	13.115	1.00	9.58
ATOM	1280	CE	LYS	B	143	97.753	3.685	13.445	1.00	2.42
ATOM	1281	NZ	LYS	B	143	98.897	3.594	14.398	1.00	2.47
ATOM	1282	N	GLY	B	144	96.058	-0.890	10.433	1.00	2.00
ATOM	1283	CA	GLY	B	144	95.370	-2.152	10.678	1.00	2.00
ATOM	1284	C	GLY	B	144	94.507	-2.544	9.497	1.00	2.00
ATOM	1285	O	GLY	B	144	94.752	-2.052	8.413	1.00	8.21
ATOM	1286	N	TYR	B	145	93.497	-3.385	9.690	1.00	2.00
ATOM	1287	CA	TYR	B	145	92.592	-3.806	8.609	1.00	2.00
ATOM	1288	C	TYR	B	145	91.583	-2.697	8.302	1.00	7.35
ATOM	1289	O	TYR	B	145	90.383	-2.825	8.584	1.00	12.70
ATOM	1290	CB	TYR	B	145	91.802	-5.019	9.031	1.00	2.00
ATOM	1291	CG	TYR	B	145	91.272	-5.791	7.870	1.00	2.00
ATOM	1292	CD1	TYR	B	145	91.693	-7.076	7.638	1.00	6.37
ATOM	1293	CD2	TYR	B	145	90.391	-5.229	6.980	1.00	4.42
ATOM	1294	CE1	TYR	B	145	91.269	-7.780	6.553	1.00	6.77
ATOM	1295	CE2	TYR	B	145	89.960	-5.932	5.883	1.00	8.86
ATOM	1296	CZ	TYR	B	145	90.415	-7.214	5.672	1.00	7.24
ATOM	1297	OH	TYR	B	145	90.089	-7.913	4.530	1.00	14.42
ATOM	1298	N	TYR	B	146	92.044	-1.640	7.666	1.00	2.00
ATOM	1299	CA	TYR	B	146	91.197	-0.529	7.414	1.00	2.00
ATOM	1300	C	TYR	B	146	90.699	-0.516	5.998	1.00	3.76
ATOM	1301	O	TYR	B	146	90.915	-1.482	5.275	1.00	10.37
ATOM	1302	CB	TYR	B	146	92.009	0.680	7.684	1.00	3.14
ATOM	1303	CG	TYR	B	146	92.936	1.022	6.533	1.00	13.13
ATOM	1304	CD1	TYR	B	146	94.289	0.579	6.519	1.00	11.22
ATOM	1305	CD2	TYR	B	146	92.474	1.813	5.461	1.00	8.01
ATOM	1306	CE1	TYR	B	146	95.155	0.931	5.462	1.00	8.77
ATOM	1307	CE2	TYR	B	146	93.310	2.167	4.416	1.00	12.69
ATOM	1308	CZ	TYR	B	146	94.648	1.740	4.411	1.00	13.07
ATOM	1309	OH	TYR	B	146	95.424	2.222	3.373	1.00	10.97
ATOM	1310	N	THR	B	147	90.015	0.570	5.619	1.00	4.21
ATOM	1311	CA	THR	B	147	89.490	0.763	4.279	1.00	2.00
ATOM	1312	C	THR	B	147	89.552	2.186	3.817	1.00	4.04
ATOM	1313	O	THR	B	147	89.318	3.087	4.577	1.00	9.41
ATOM	1314	CB	THR	B	147	88.091	0.346	4.160	1.00	2.00
ATOM	1315	OG1	THR	B	147	88.028	-1.071	4.310	1.00	13.70
ATOM	1316	CG2	THR	B	147	87.586	0.701	2.776	1.00	2.00
ATOM	1317	N	MET	B	148	89.895	2.373	2.558	1.00	6.67
ATOM	1318	CA	MET	B	148	90.009	3.683	1.981	1.00	9.00

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ATOM	1319	C	MET	B	148	90.078	3.381	0.471	1.00	16.51
ATOM	1320	O	MET	B	148	91.134	3.332	-0.131	1.00	19.42
ATOM	1321	CB	MET	B	148	91.275	4.308	2.529	1.00	2.00
ATOM	1322	CG	MET	B	148	91.454	5.720	2.160	1.00	6.86
ATOM	1323	SD	MET	B	148	90.228	6.759	2.846	1.00	9.58
ATOM	1324	CE	MET	B	148	90.609	6.667	4.646	1.00	10.21
ATOM	1325	N	SER	B	149	88.919	3.176	-0.133	1.00	22.24
ATOM	1326	CA	SER	B	149	88.839	2.801	-1.538	1.00	21.45
ATOM	1327	C	SER	B	149	89.544	3.729	-2.500	1.00	20.51
ATOM	1328	O	SER	B	149	89.894	3.285	-3.602	1.00	22.63
ATOM	1329	CB	SER	B	149	87.367	2.640	-1.977	1.00	24.02
ATOM	1330	OG	SER	B	149	86.627	3.835	-1.737	1.00	31.90
ATOM	1331	N	ASN	B	150	89.702	5.006	-2.150	1.00	17.04
ATOM	1332	CA	ASN	B	150	90.390	5.932	-3.067	1.00	25.11
ATOM	1333	C	ASN	B	150	90.427	7.377	-2.676	1.00	24.08
ATOM	1334	O	ASN	B	150	89.967	7.754	-1.615	1.00	28.75
ATOM	1335	CB	ASN	B	150	89.848	5.858	-4.517	1.00	27.99
ATOM	1336	CG	ASN	B	150	88.351	6.091	-4.618	1.00	33.20
ATOM	1337	OD1	ASN	B	150	87.814	7.042	-4.056	1.00	33.40
ATOM	1338	ND2	ASN	B	150	87.668	5.214	-5.352	1.00	38.50
ATOM	1339	N	ASN	B	151	90.998	8.196	-3.539	1.00	20.79
ATOM	1340	CA	ASN	B	151	91.072	9.601	-3.225	1.00	22.43
ATOM	1341	C	ASN	B	151	89.748	10.335	-3.372	1.00	20.18
ATOM	1342	O	ASN	B	151	89.671	11.573	-3.240	1.00	21.76
ATOM	1343	CB	ASN	B	151	92.101	10.268	-4.099	1.00	31.12
ATOM	1344	CG	ASN	B	151	93.444	9.541	-3.984	1.00	32.35
ATOM	1345	OD1	ASN	B	151	94.148	9.539	-4.974	1.00	41.62
ATOM	1346	ND2	ASN	B	151	93.825	9.231	-2.781	1.00	33.50
ATOM	1347	N	LEU	B	152	88.712	9.581	-3.696	1.00	14.54
ATOM	1348	CA	LEU	B	152	87.409	10.165	-3.805	1.00	7.65
ATOM	1349	C	LEU	B	152	86.931	10.386	-2.357	1.00	10.43
ATOM	1350	O	LEU	B	152	86.007	11.173	-2.068	1.00	15.38
ATOM	1351	CB	LEU	B	152	86.533	9.235	-4.608	1.00	8.56
ATOM	1352	CG	LEU	B	152	86.665	9.447	-6.117	1.00	8.40
ATOM	1353	CD1	LEU	B	152	87.090	10.874	-6.484	1.00	2.12
ATOM	1354	CD2	LEU	B	152	87.627	8.411	-6.571	1.00	9.92
ATOM	1355	N	VAL	B	153	87.611	9.723	-1.436	1.00	2.20
ATOM	1356	CA	VAL	B	153	87.343	9.939	-0.049	1.00	2.00
ATOM	1357	C	VAL	B	153	88.719	9.977	0.547	1.00	5.10
ATOM	1358	O	VAL	B	153	89.541	9.160	0.213	1.00	8.89
ATOM	1359	CB	VAL	B	153	86.551	8.844	0.568	1.00	4.85
ATOM	1360	CG1	VAL	B	153	87.446	7.971	1.486	1.00	8.94
ATOM	1361	CG2	VAL	B	153	85.420	9.484	1.367	1.00	6.56
ATOM	1362	N	THR	B	154	88.964	10.901	1.462	1.00	8.60
ATOM	1363	CA	THR	B	154	90.283	11.059	2.047	1.00	8.26
ATOM	1364	C	THR	B	154	90.224	11.372	3.540	1.00	12.06
ATOM	1365	O	THR	B	154	89.462	12.263	3.955	1.00	9.82
ATOM	1366	CB	THR	B	154	90.983	12.220	1.339	1.00	10.75
ATOM	1367	OG1	THR	B	154	91.112	13.349	2.224	1.00	12.64
ATOM	1368	CG2	THR	B	154	90.146	12.637	0.150	1.00	3.62
ATOM	1369	N	LEU	B	155	91.080	10.701	4.327	1.00	11.13
ATOM	1370	CA	LEU	B	155	91.154	10.904	5.784	1.00	5.68
ATOM	1371	C	LEU	B	155	92.108	12.054	6.103	1.00	8.41
ATOM	1372	O	LEU	B	155	93.301	11.826	6.278	1.00	16.19
ATOM	1373	CB	LEU	B	155	91.716	9.663	6.456	1.00	2.00
ATOM	1374	CG	LEU	B	155	91.590	9.569	7.964	1.00	2.00
ATOM	1375	CD1	LEU	B	155	92.404	8.422	8.430	1.00	4.45
ATOM	1376	CD2	LEU	B	155	91.986	10.870	8.641	1.00	6.05
ATOM	1377	N	GLU	B	156	91.630	13.276	6.237	1.00	6.54
ATOM	1378	CA	GLU	B	156	92.578	14.317	6.551	1.00	9.31

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ATOM	1379	C	GLU	B	156	92.676	14.747	8.012	1.00	11.28
ATOM	1380	O	GLU	B	156	91.722	14.699	8.762	1.00	12.55
ATOM	1381	CB	GLU	B	156	92.356	15.509	5.676	1.00	12.15
ATOM	1382	CG	GLU	B	156	91.093	16.194	5.848	1.00	14.87
ATOM	1383	CD	GLU	B	156	90.711	16.820	4.523	1.00	23.83
ATOM	1384	OE1	GLU	B	156	91.280	16.298	3.525	1.00	19.63
ATOM	1385	OE2	GLU	B	156	89.885	17.795	4.466	1.00	24.80
ATOM	1386	N	ASN	B	157	93.890	15.122	8.397	1.00	15.16
ATOM	1387	CA	ASN	B	157	94.260	15.537	9.741	1.00	10.09
ATOM	1388	C	ASN	B	157	94.085	14.480	10.794	1.00	10.08
ATOM	1389	O	ASN	B	157	94.348	14.708	11.970	1.00	8.29
ATOM	1390	CB	ASN	B	157	93.534	16.788	10.105	1.00	16.65
ATOM	1391	CG	ASN	B	157	94.290	18.010	9.662	1.00	29.12
ATOM	1392	OD1	ASN	B	157	94.160	18.459	8.502	1.00	31.31
ATOM	1393	ND2	ASN	B	157	95.104	18.563	10.580	1.00	30.88
ATOM	1394	N	GLY	B	158	93.723	13.282	10.355	1.00	11.44
ATOM	1395	CA	GLY	B	158	93.511	12.218	11.311	1.00	15.31
ATOM	1396	C	GLY	B	158	92.356	12.591	12.224	1.00	17.01
ATOM	1397	O	GLY	B	158	92.198	11.990	13.292	1.00	17.53
ATOM	1398	N	LYS	B	159	91.549	13.574	11.785	1.00	19.52
ATOM	1399	CA	LYS	B	159	90.371	14.087	12.524	1.00	17.56
ATOM	1400	C	LYS	B	159	89.072	13.824	11.764	1.00	14.98
ATOM	1401	O	LYS	B	159	88.097	13.353	12.353	1.00	17.91
ATOM	1402	CB	LYS	B	159	90.469	15.586	12.788	1.00	20.96
ATOM	1403	CG	LYS	B	159	91.818	16.180	12.491	1.00	36.27
ATOM	1404	CD	LYS	B	159	92.746	16.257	13.737	1.00	49.87
ATOM	1405	CE	LYS	B	159	94.043	17.081	13.466	1.00	55.82
ATOM	1406	NZ	LYS	B	159	94.930	17.245	14.673	1.00	55.29
ATOM	1407	N	GLN	B	160	89.057	14.066	10.460	1.00	6.06
ATOM	1408	CA	GLN	B	160	87.846	13.810	9.718	1.00	6.36
ATOM	1409	C	GLN	B	160	87.978	12.999	8.432	1.00	8.22
ATOM	1410	O	GLN	B	160	89.066	12.647	8.046	1.00	13.03
ATOM	1411	CB	GLN	B	160	87.198	15.137	9.393	1.00	7.92
ATOM	1412	CG	GLN	B	160	87.651	15.797	8.131	1.00	6.41
ATOM	1413	CD	GLN	B	160	88.404	17.091	8.453	1.00	10.14
ATOM	1414	OE1	GLN	B	160	88.500	17.985	7.630	1.00	13.83
ATOM	1415	NE2	GLN	B	160	88.898	17.199	9.676	1.00	10.30
ATOM	1416	N	LEU	B	161	86.851	12.678	7.803	1.00	7.98
ATOM	1417	CA	LEU	B	161	86.792	12.012	6.506	1.00	2.95
ATOM	1418	C	LEU	B	161	86.140	13.096	5.609	1.00	6.81
ATOM	1419	O	LEU	B	161	85.091	13.675	5.949	1.00	4.73
ATOM	1420	CB	LEU	B	161	85.895	10.800	6.565	1.00	2.00
ATOM	1421	CG	LEU	B	161	86.554	9.667	7.322	1.00	3.72
ATOM	1422	CD1	LEU	B	161	85.542	8.606	7.746	1.00	4.99
ATOM	1423	CD2	LEU	B	161	87.546	9.024	6.385	1.00	11.22
ATOM	1424	N	THR	B	162	86.758	13.384	4.464	1.00	8.42
ATOM	1425	CA	THR	B	162	86.233	14.396	3.563	1.00	4.41
ATOM	1426	C	THR	B	162	85.850	13.769	2.260	1.00	8.38
ATOM	1427	O	THR	B	162	86.484	12.832	1.825	1.00	18.94
ATOM	1428	CB	THR	B	162	87.245	15.417	3.276	1.00	3.30
ATOM	1429	OG1	THR	B	162	87.413	16.244	4.439	1.00	4.51
ATOM	1430	CG2	THR	B	162	86.808	16.204	2.070	1.00	3.21
ATOM	1431	N	VAL	B	163	84.774	14.216	1.650	1.00	9.67
ATOM	1432	CA	VAL	B	163	84.401	13.613	0.385	1.00	10.99
ATOM	1433	C	VAL	B	163	84.495	14.651	-0.723	1.00	11.90
ATOM	1434	O	VAL	B	163	84.278	15.861	-0.497	1.00	5.84
ATOM	1435	CB	VAL	B	163	82.914	12.972	0.411	1.00	6.53
ATOM	1436	CG1	VAL	B	163	82.889	11.666	1.205	1.00	2.88
ATOM	1437	CG2	VAL	B	163	81.914	13.942	0.962	1.00	2.00
ATOM	1438	N	LYS	B	164	84.838	14.162	-1.914	1.00	11.64

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ATOM	1439	CA	LYS	B	164	84.940	15.030	-3.073	1.00	14.76
ATOM	1440	C	LYS	B	164	83.689	14.996	-3.907	1.00	10.78
ATOM	1441	O	LYS	B	164	83.414	15.919	-4.640	1.00	11.04
ATOM	1442	CB	LYS	B	164	86.141	14.638	-3.962	1.00	20.80
ATOM	1443	CG	LYS	B	164	87.462	14.464	-3.222	1.00	23.24
ATOM	1444	CD	LYS	B	164	88.606	15.000	-4.012	1.00	28.79
ATOM	1445	CE	LYS	B	164	89.916	14.771	-3.278	1.00	35.63
ATOM	1446	NZ	LYS	B	164	89.942	15.576	-2.030	1.00	47.07
ATOM	1447	N	ARG	B	165	82.913	13.939	-3.798	1.00	11.25
ATOM	1448	CA	ARG	B	165	81.718	13.882	-4.621	1.00	16.96
ATOM	1449	C	ARG	B	165	80.408	14.068	-3.850	1.00	20.15
ATOM	1450	O	ARG	B	165	80.143	13.377	-2.844	1.00	23.50
ATOM	1451	CB	ARG	B	165	81.679	12.554	-5.363	1.00	15.08
ATOM	1452	CG	ARG	B	165	82.324	12.586	-6.734	1.00	19.27
ATOM	1453	CD	ARG	B	165	83.365	11.465	-6.874	1.00	20.89
ATOM	1454	NE	ARG	B	165	82.936	10.407	-7.777	1.00	18.38
ATOM	1455	CZ	ARG	B	165	83.480	10.191	-8.966	1.00	22.35
ATOM	1456	NH1	ARG	B	165	84.472	10.969	-9.382	1.00	20.15
ATOM	1457	NH2	ARG	B	165	83.033	9.198	-9.733	1.00	25.57
ATOM	1458	N	GLN	B	166	79.564	14.985	-4.305	1.00	16.48
ATOM	1459	CA	GLN	B	166	78.285	15.151	-3.611	1.00	15.63
ATOM	1460	C	GLN	B	166	77.550	13.803	-3.631	1.00	16.13
ATOM	1461	O	GLN	B	166	77.881	12.924	-4.426	1.00	17.79
ATOM	1462	CB	GLN	B	166	77.401	16.165	-4.325	1.00	14.01
ATOM	1463	CG	GLN	B	166	76.760	15.698	-5.641	1.00	2.20
ATOM	1464	CD	GLN	B	166	76.509	16.902	-6.555	1.00	12.60
ATOM	1465	OE1	GLN	B	166	76.857	18.052	-6.220	1.00	8.85
ATOM	1466	NE2	GLN	B	166	75.915	16.647	-7.710	1.00	16.46
ATOM	1467	N	GLY	B	167	76.554	13.635	-2.769	1.00	14.51
ATOM	1468	CA	GLY	B	167	75.802	12.398	-2.799	1.00	15.44
ATOM	1469	C	GLY	B	167	75.279	11.861	-1.500	1.00	13.55
ATOM	1470	O	GLY	B	167	75.422	12.484	-0.469	1.00	18.27
ATOM	1471	N	LEU	B	168	74.665	10.692	-1.560	1.00	8.93
ATOM	1472	CA	LEU	B	168	74.122	10.078	-0.373	1.00	10.64
ATOM	1473	C	LEU	B	168	75.233	9.189	0.161	1.00	8.02
ATOM	1474	O	LEU	B	168	76.012	8.668	-0.621	1.00	14.14
ATOM	1475	CB	LEU	B	168	72.894	9.231	-0.757	1.00	19.51
ATOM	1476	CG	LEU	B	168	71.465	9.648	-0.387	1.00	20.39
ATOM	1477	CD1	LEU	B	168	71.518	10.531	0.861	1.00	27.57
ATOM	1478	CD2	LEU	B	168	70.809	10.403	-1.554	1.00	21.86
ATOM	1479	N	TYR	B	169	75.321	8.995	1.462	1.00	2.00
ATOM	1480	CA	TYR	B	169	76.362	8.135	1.969	1.00	2.00
ATOM	1481	C	TYR	B	169	75.868	7.499	3.239	1.00	2.97
ATOM	1482	O	TYR	B	169	75.149	8.129	3.966	1.00	8.98
ATOM	1483	CB	TYR	B	169	77.609	8.941	2.346	1.00	10.73
ATOM	1484	CG	TYR	B	169	78.415	9.568	1.212	1.00	13.63
ATOM	1485	CD1	TYR	B	169	78.014	10.757	0.601	1.00	15.49
ATOM	1486	CD2	TYR	B	169	79.579	8.955	0.740	1.00	16.50
ATOM	1487	CE1	TYR	B	169	78.759	11.308	-0.454	1.00	17.42
ATOM	1488	CE2	TYR	B	169	80.328	9.504	-0.317	1.00	14.28
ATOM	1489	CZ	TYR	B	169	79.914	10.671	-0.899	1.00	16.19
ATOM	1490	OH	TYR	B	169	80.668	11.227	-1.901	1.00	20.54
ATOM	1491	N	TYR	B	170	76.275	6.285	3.566	1.00	5.35
ATOM	1492	CA	TYR	B	170	75.828	5.713	4.825	1.00	7.41
ATOM	1493	C	TYR	B	170	77.011	5.977	5.728	1.00	9.88
ATOM	1494	O	TYR	B	170	78.073	5.441	5.470	1.00	15.65
ATOM	1495	CB	TYR	B	170	75.634	4.221	4.726	1.00	6.74
ATOM	1496	CG	TYR	B	170	75.325	3.665	6.068	1.00	6.62
ATOM	1497	CD1	TYR	B	170	74.210	4.066	6.736	1.00	2.00
ATOM	1498	CD2	TYR	B	170	76.177	2.765	6.689	1.00	12.14

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ATOM	1499	CE1	TYR	B	170	73.945	3.585	8.000	1.00	13.25
ATOM	1500	CE2	TYR	B	170	75.920	2.274	7.962	1.00	13.44
ATOM	1501	CZ	TYR	B	170	74.806	2.685	8.617	1.00	12.23
ATOM	1502	OH	TYR	B	170	74.552	2.212	9.893	1.00	13.87
ATOM	1503	N	ILE	B	171	76.836	6.749	6.797	1.00	7.51
ATOM	1504	CA	ILE	B	171	77.955	7.095	7.665	1.00	5.88
ATOM	1505	C	ILE	B	171	77.865	6.453	9.030	1.00	7.41
ATOM	1506	O	ILE	B	171	76.784	6.369	9.588	1.00	16.25
ATOM	1507	CB	ILE	B	171	78.019	8.574	7.828	1.00	4.86
ATOM	1508	CG1	ILE	B	171	78.298	9.193	6.458	1.00	9.74
ATOM	1509	CG2	ILE	B	171	79.052	8.920	8.851	1.00	4.14
ATOM	1510	CD1	ILE	B	171	78.209	10.767	6.395	1.00	11.91
ATOM	1511	N	TYR	B	172	78.983	6.005	9.582	1.00	3.38
ATOM	1512	CA	TYR	B	172	78.946	5.341	10.879	1.00	4.63
ATOM	1513	C	TYR	B	172	80.168	5.537	11.729	1.00	6.78
ATOM	1514	O	TYR	B	172	81.177	5.991	11.244	1.00	20.44
ATOM	1515	CB	TYR	B	172	78.780	3.869	10.683	1.00	2.00
ATOM	1516	CG	TYR	B	172	79.943	3.281	9.976	1.00	4.11
ATOM	1517	CD1	TYR	B	172	79.984	3.244	8.594	1.00	6.76
ATOM	1518	CD2	TYR	B	172	80.960	2.663	10.687	1.00	7.58
ATOM	1519	CE1	TYR	B	172	81.014	2.575	7.932	1.00	13.29
ATOM	1520	CE2	TYR	B	172	81.992	1.988	10.052	1.00	7.01
ATOM	1521	CZ	TYR	B	172	82.022	1.929	8.684	1.00	10.87
ATOM	1522	OH	TYR	B	172	83.019	1.154	8.114	1.00	3.09
ATOM	1523	N	ALA	B	173	80.081	5.207	13.002	1.00	2.00
ATOM	1524	CA	ALA	B	173	81.215	5.356	13.873	1.00	2.74
ATOM	1525	C	ALA	B	173	80.917	4.444	15.055	1.00	8.08
ATOM	1526	O	ALA	B	173	79.910	4.604	15.724	1.00	15.08
ATOM	1527	CB	ALA	B	173	81.339	6.808	14.297	1.00	2.00
ATOM	1528	N	GLN	B	174	81.762	3.456	15.300	1.00	9.50
ATOM	1529	CA	GLN	B	174	81.525	2.545	16.410	1.00	9.58
ATOM	1530	C	GLN	B	174	82.428	3.130	17.459	1.00	8.77
ATOM	1531	O	GLN	B	174	83.540	3.524	17.156	1.00	13.74
ATOM	1532	CB	GLN	B	174	81.964	1.116	16.038	1.00	13.63
ATOM	1533	CG	GLN	B	174	81.060	-0.023	16.536	1.00	26.79
ATOM	1534	CD	GLN	B	174	81.614	-0.734	17.829	1.00	38.91
ATOM	1535	OE1	GLN	B	174	81.289	-1.911	18.112	1.00	40.49
ATOM	1536	NE2	GLN	B	174	82.452	-0.020	18.599	1.00	38.55
ATOM	1537	N	VAL	B	175	81.946	3.284	18.675	1.00	8.37
ATOM	1538	CA	VAL	B	175	82.819	3.798	19.705	1.00	10.81
ATOM	1539	C	VAL	B	175	82.584	3.152	21.039	1.00	15.14
ATOM	1540	O	VAL	B	175	81.484	3.213	21.577	1.00	24.32
ATOM	1541	CB	VAL	B	175	82.690	5.295	19.925	1.00	8.47
ATOM	1542	CG1	VAL	B	175	83.275	5.628	21.317	1.00	2.00
ATOM	1543	CG2	VAL	B	175	83.426	6.055	18.800	1.00	8.08
ATOM	1544	N	THR	B	176	83.626	2.532	21.574	1.00	14.95
ATOM	1545	CA	THR	B	176	83.533	1.903	22.875	1.00	14.75
ATOM	1546	C	THR	B	176	84.471	2.742	23.747	1.00	17.58
ATOM	1547	O	THR	B	176	85.396	3.376	23.236	1.00	16.82
ATOM	1548	CB	THR	B	176	83.917	0.390	22.811	1.00	6.05
ATOM	1549	OG1	THR	B	176	84.815	0.037	23.870	1.00	2.00
ATOM	1550	CG2	THR	B	176	84.511	0.073	21.498	1.00	6.55
ATOM	1551	N	PHE	B	177	84.167	2.837	25.037	1.00	15.91
ATOM	1552	CA	PHE	B	177	84.998	3.610	25.934	1.00	13.76
ATOM	1553	C	PHE	B	177	85.030	2.896	27.261	1.00	13.56
ATOM	1554	O	PHE	B	177	84.307	1.935	27.457	1.00	19.08
ATOM	1555	CB	PHE	B	177	84.476	5.041	26.069	1.00	13.80
ATOM	1556	CG	PHE	B	177	83.101	5.139	26.617	1.00	16.29
ATOM	1557	CD1	PHE	B	177	81.995	4.840	25.814	1.00	16.23
ATOM	1558	CD2	PHE	B	177	82.899	5.563	27.937	1.00	14.70



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ATOM	1559	CE1	PHE	B	177	80.685	4.968	26.316	1.00	14.82
ATOM	1560	CE2	PHE	B	177	81.615	5.695	28.446	1.00	13.50
ATOM	1561	CZ	PHE	B	177	80.494	5.394	27.628	1.00	11.28
ATOM	1562	N	CYS	B	178	85.899	3.320	28.160	1.00	10.23
ATOM	1563	CA	CYS	B	178	86.026	2.647	29.434	1.00	10.38
ATOM	1564	C	CYS	B	178	86.078	3.728	30.452	1.00	17.83
ATOM	1565	O	CYS	B	178	86.846	4.648	30.295	1.00	22.85
ATOM	1566	CB	CYS	B	178	87.325	1.902	29.448	1.00	3.19
ATOM	1567	SG	CYS	B	178	87.353	0.602	30.662	1.00	2.59
ATOM	1568	N	SER	B	179	85.264	3.656	31.489	1.00	24.12
ATOM	1569	CA	SER	B	179	85.295	4.732	32.446	1.00	28.29
ATOM	1570	C	SER	B	179	84.768	4.216	33.736	1.00	34.31
ATOM	1571	O	SER	B	179	84.639	3.008	33.907	1.00	31.96
ATOM	1572	CB	SER	B	179	84.407	5.861	31.942	1.00	29.95
ATOM	1573	OG	SER	B	179	83.075	5.398	31.738	1.00	33.13
ATOM	1574	N	ASN	B	180	84.423	5.150	34.622	1.00	42.85
ATOM	1575	CA	ASN	B	180	83.883	4.822	35.937	1.00	47.30
ATOM	1576	C	ASN	B	180	82.668	5.674	36.308	1.00	50.62
ATOM	1577	O	ASN	B	180	82.391	6.697	35.686	1.00	53.53
ATOM	1578	CB	ASN	B	180	84.958	5.019	36.981	1.00	46.27
ATOM	1579	CG	ASN	B	180	84.701	4.238	38.205	1.00	45.32
ATOM	1580	OD1	ASN	B	180	84.138	4.744	39.170	1.00	49.06
ATOM	1581	ND2	ASN	B	180	85.127	2.987	38.194	1.00	44.36
ATOM	1582	N	ARG	B	181	81.917	5.232	37.305	1.00	53.51
ATOM	1583	CA	ARG	B	181	80.776	6.007	37.709	1.00	58.42
ATOM	1584	C	ARG	B	181	81.272	7.307	38.293	1.00	60.66
ATOM	1585	O	ARG	B	181	81.188	8.325	37.638	1.00	60.55
ATOM	1586	CB	ARG	B	181	79.904	5.243	38.717	1.00	63.75
ATOM	1587	CG	ARG	B	181	80.522	4.976	40.092	1.00	69.41
ATOM	1588	CD	ARG	B	181	79.467	5.040	41.209	1.00	73.09
ATOM	1589	NE	ARG	B	181	79.916	5.821	42.364	1.00	77.20
ATOM	1590	CZ	ARG	B	181	79.613	7.101	42.572	1.00	79.29
ATOM	1591	NH1	ARG	B	181	78.853	7.771	41.706	1.00	79.62
ATOM	1592	NH2	ARG	B	181	80.074	7.721	43.650	1.00	78.85
ATOM	1593	N	GLU	B	182	81.826	7.280	39.498	1.00	63.65
ATOM	1594	CA	GLU	B	182	82.288	8.505	40.136	1.00	69.45
ATOM	1595	C	GLU	B	182	83.531	9.147	39.521	1.00	72.38
ATOM	1596	O	GLU	B	182	83.642	10.380	39.475	1.00	73.90
ATOM	1597	CB	GLU	B	182	82.518	8.260	41.634	1.00	71.63
ATOM	1598	CG	GLU	B	182	82.889	9.522	42.459	1.00	76.19
ATOM	1599	CD	GLU	B	182	82.080	10.774	42.086	1.00	77.64
ATOM	1600	OE1	GLU	B	182	82.702	11.804	41.731	1.00	78.16
ATOM	1601	OE2	GLU	B	182	80.830	10.732	42.150	1.00	77.25
ATOM	1602	N	ALA	B	183	84.468	8.320	39.066	1.00	74.41
ATOM	1603	CA	ALA	B	183	85.697	8.824	38.467	1.00	74.67
ATOM	1604	C	ALA	B	183	85.449	10.181	37.821	1.00	74.41
ATOM	1605	O	ALA	B	183	85.600	11.222	38.463	1.00	74.20
ATOM	1606	CB	ALA	B	183	86.210	7.844	37.435	1.00	77.52
ATOM	1607	N	SER	B	184	85.075	10.171	36.548	1.00	73.54
ATOM	1608	CA	SER	B	184	84.795	11.415	35.864	1.00	76.06
ATOM	1609	C	SER	B	184	83.362	11.706	36.269	1.00	75.05
ATOM	1610	O	SER	B	184	82.935	12.859	36.348	1.00	73.99
ATOM	1611	CB	SER	B	184	84.915	11.245	34.332	1.00	79.33
ATOM	1612	OG	SER	B	184	86.061	11.918	33.798	1.00	77.98
ATOM	1613	N	SER	B	185	82.638	10.629	36.549	1.00	74.57
ATOM	1614	CA	SER	B	185	81.236	10.710	36.947	1.00	73.67
ATOM	1615	C	SER	B	185	80.493	11.749	36.138	1.00	72.12
ATOM	1616	O	SER	B	185	79.918	11.449	35.087	1.00	71.48
ATOM	1617	CB	SER	B	185	81.107	11.044	38.431	1.00	74.09
ATOM	1618	OG	SER	B	185	80.133	10.209	39.035	1.00	75.62

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ATOM	1619	N	GLN	B	186	80.514	12.978	36.637	1.00	69.74
ATOM	1620	CA	GLN	B	186	79.853	14.077	35.963	1.00	68.40
ATOM	1621	C	GLN	B	186	78.555	13.584	35.312	1.00	65.59
ATOM	1622	O	GLN	B	186	77.761	12.849	35.933	1.00	65.46
ATOM	1623	CB	GLN	B	186	80.796	14.681	34.899	1.00	68.75
ATOM	1624	CG	GLN	B	186	81.436	13.661	33.951	1.00	70.21
ATOM	1625	CD	GLN	B	186	80.906	13.757	32.516	1.00	74.24
ATOM	1626	OE1	GLN	B	186	80.471	14.826	32.068	1.00	73.48
ATOM	1627	NE2	GLN	B	186	80.945	12.635	31.789	1.00	74.88
ATOM	1628	N	ALA	B	187	78.370	13.984	34.055	1.00	58.69
ATOM	1629	CA	ALA	B	187	77.206	13.629	33.267	1.00	48.44
ATOM	1630	C	ALA	B	187	77.595	12.457	32.379	1.00	42.10
ATOM	1631	O	ALA	B	187	78.689	11.902	32.515	1.00	39.76
ATOM	1632	CB	ALA	B	187	76.772	14.825	32.429	1.00	50.08
ATOM	1633	N	PRO	B	188	76.706	12.060	31.458	1.00	36.06
ATOM	1634	CA	PRO	B	188	77.067	10.931	30.602	1.00	34.03
ATOM	1635	C	PRO	B	188	78.267	11.192	29.666	1.00	31.25
ATOM	1636	O	PRO	B	188	78.908	12.261	29.691	1.00	28.39
ATOM	1637	CB	PRO	B	188	75.772	10.652	29.826	1.00	36.41
ATOM	1638	CG	PRO	B	188	75.053	11.994	29.796	1.00	29.95
ATOM	1639	CD	PRO	B	188	75.370	12.594	31.138	1.00	32.72
ATOM	1640	N	PHE	B	189	78.527	10.179	28.843	1.00	25.22
ATOM	1641	CA	PHE	B	189	79.580	10.169	27.852	1.00	14.14
ATOM	1642	C	PHE	B	189	78.853	10.214	26.542	1.00	8.23
ATOM	1643	O	PHE	B	189	78.403	9.200	26.072	1.00	9.99
ATOM	1644	CB	PHE	B	189	80.337	8.844	27.922	1.00	16.56
ATOM	1645	CG	PHE	B	189	81.306	8.655	26.797	1.00	20.89
ATOM	1646	CD1	PHE	B	189	80.870	8.267	25.534	1.00	21.92
ATOM	1647	CD2	PHE	B	189	82.643	8.950	26.972	1.00	17.43
ATOM	1648	CE1	PHE	B	189	81.749	8.191	24.463	1.00	19.12
ATOM	1649	CE2	PHE	B	189	83.514	8.873	25.904	1.00	16.22
ATOM	1650	CZ	PHE	B	189	83.066	8.496	24.647	1.00	14.81
ATOM	1651	N	ILE	B	190	78.689	11.363	25.936	1.00	9.60
ATOM	1652	CA	ILE	B	190	77.986	11.361	24.652	1.00	11.64
ATOM	1653	C	ILE	B	190	79.004	11.470	23.492	1.00	10.95
ATOM	1654	O	ILE	B	190	80.010	12.173	23.591	1.00	10.11
ATOM	1655	CB	ILE	B	190	76.863	12.519	24.585	1.00	10.12
ATOM	1656	CG1	ILE	B	190	77.299	13.664	23.682	1.00	11.84
ATOM	1657	CG2	ILE	B	190	76.590	13.124	25.968	1.00	2.00
ATOM	1658	CD1	ILE	B	190	77.153	13.359	22.248	1.00	21.58
ATOM	1659	N	ALA	B	191	78.731	10.773	22.398	1.00	7.54
ATOM	1660	CA	ALA	B	191	79.605	10.780	21.239	1.00	3.25
ATOM	1661	C	ALA	B	191	78.773	11.336	20.105	1.00	2.20
ATOM	1662	O	ALA	B	191	77.581	11.108	20.034	1.00	2.00
ATOM	1663	CB	ALA	B	191	80.068	9.372	20.931	1.00	2.00
ATOM	1664	N	SER	B	192	79.394	12.077	19.211	1.00	6.72
ATOM	1665	CA	SER	B	192	78.639	12.666	18.113	1.00	10.62
ATOM	1666	C	SER	B	192	79.339	12.606	16.756	1.00	8.71
ATOM	1667	O	SER	B	192	80.535	12.827	16.630	1.00	8.07
ATOM	1668	CB	SER	B	192	78.272	14.134	18.432	1.00	11.85
ATOM	1669	OG	SER	B	192	78.437	14.422	19.817	1.00	14.98
ATOM	1670	N	LEU	B	193	78.563	12.291	15.741	1.00	5.47
ATOM	1671	CA	LEU	B	193	79.072	12.239	14.405	1.00	4.07
ATOM	1672	C	LEU	B	193	78.811	13.663	13.865	1.00	4.15
ATOM	1673	O	LEU	B	193	77.660	14.045	13.620	1.00	3.93
ATOM	1674	CB	LEU	B	193	78.288	11.178	13.618	1.00	2.00
ATOM	1675	CG	LEU	B	193	78.832	10.785	12.234	1.00	8.07
ATOM	1676	CD1	LEU	B	193	77.731	10.623	11.245	1.00	6.97
ATOM	1677	CD2	LEU	B	193	79.742	11.871	11.701	1.00	8.54
ATOM	1678	N	CYS	B	194	79.855	14.453	13.651	1.00	2.00

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ATOM	1679	CA	CYS	B	194	79.620	15.806	13.137	1.00	4.09
ATOM	1680	C	CYS	B	194	79.954	15.972	11.687	1.00	4.58
ATOM	1681	O	CYS	B	194	80.772	15.236	11.156	1.00	10.22
ATOM	1682	CB	CYS	B	194	80.391	16.832	13.916	1.00	3.16
ATOM	1683	SG	CYS	B	194	80.033	16.677	15.629	1.00	15.78
ATOM	1684	N	LEU	B	195	79.317	16.929	11.028	1.00	2.00
ATOM	1685	CA	LEU	B	195	79.577	17.115	9.623	1.00	2.00
ATOM	1686	C	LEU	B	195	79.903	18.537	9.415	1.00	4.20
ATOM	1687	O	LEU	B	195	79.337	19.391	10.045	1.00	2.89
ATOM	1688	CB	LEU	B	195	78.376	16.721	8.789	1.00	2.00
ATOM	1689	CG	LEU	B	195	78.067	17.709	7.693	1.00	2.00
ATOM	1690	CD1	LEU	B	195	78.900	17.318	6.584	1.00	6.60
ATOM	1691	CD2	LEU	B	195	76.636	17.659	7.242	1.00	4.83
ATOM	1692	N	LYS	B	196	80.852	18.779	8.524	1.00	12.10
ATOM	1693	CA	LYS	B	196	81.295	20.121	8.230	1.00	13.90
ATOM	1694	C	LYS	B	196	81.305	20.232	6.746	1.00	13.90
ATOM	1695	O	LYS	B	196	82.148	19.630	6.105	1.00	19.14
ATOM	1696	CB	LYS	B	196	82.690	20.359	8.779	1.00	8.40
ATOM	1697	CG	LYS	B	196	83.129	21.766	8.573	1.00	11.90
ATOM	1698	CD	LYS	B	196	82.235	22.767	9.243	1.00	20.50
ATOM	1699	CE	LYS	B	196	82.434	24.107	8.629	1.00	20.80
ATOM	1700	NZ	LYS	B	196	82.764	23.911	7.188	1.00	34.47
ATOM	1701	N	SER	B	197	80.307	20.917	6.195	1.00	17.76
ATOM	1702	CA	SER	B	197	80.231	21.123	4.754	1.00	16.16
ATOM	1703	C	SER	B	197	80.806	22.480	4.449	1.00	16.42
ATOM	1704	O	SER	B	197	80.706	23.396	5.246	1.00	18.38
ATOM	1705	CB	SER	B	197	78.817	21.130	4.252	1.00	18.11
ATOM	1706	OG	SER	B	197	78.764	21.969	3.109	1.00	24.71
ATOM	1707	N	PRO	B	198	81.400	22.630	3.275	1.00	14.60
ATOM	1708	CA	PRO	B	198	81.997	23.881	2.866	1.00	15.90
ATOM	1709	C	PRO	B	198	81.037	25.074	2.891	1.00	18.03
ATOM	1710	O	PRO	B	198	79.953	25.034	2.305	1.00	17.31
ATOM	1711	CB	PRO	B	198	82.481	23.574	1.464	1.00	16.26
ATOM	1712	CG	PRO	B	198	81.619	22.482	1.015	1.00	17.54
ATOM	1713	CD	PRO	B	198	81.516	21.631	2.209	1.00	17.51
ATOM	1714	N	GLY	B	199	81.485	26.146	3.539	1.00	20.54
ATOM	1715	CA	GLY	B	199	80.704	27.359	3.627	1.00	20.73
ATOM	1716	C	GLY	B	199	79.486	27.234	4.481	1.00	17.45
ATOM	1717	O	GLY	B	199	78.494	27.891	4.249	1.00	18.30
ATOM	1718	N	ARG	B	200	79.565	26.362	5.463	1.00	16.70
ATOM	1719	CA	ARG	B	200	78.452	26.154	6.359	1.00	15.16
ATOM	1720	C	ARG	B	200	79.020	25.947	7.722	1.00	18.23
ATOM	1721	O	ARG	B	200	80.131	25.456	7.865	1.00	20.93
ATOM	1722	CB	ARG	B	200	77.713	24.905	5.962	1.00	11.57
ATOM	1723	CG	ARG	B	200	77.239	24.951	4.574	1.00	12.90
ATOM	1724	CD	ARG	B	200	76.123	25.926	4.449	1.00	15.77
ATOM	1725	NE	ARG	B	200	75.741	26.004	3.054	1.00	33.47
ATOM	1726	CZ	ARG	B	200	74.509	26.209	2.629	1.00	37.06
ATOM	1727	NH1	ARG	B	200	73.526	26.351	3.510	1.00	39.77
ATOM	1728	NH2	ARG	B	200	74.268	26.267	1.321	1.00	41.59
ATOM	1729	N	PHE	B	201	78.285	26.308	8.750	1.00	18.30
ATOM	1730	CA	PHE	B	201	78.846	26.057	10.047	1.00	18.40
ATOM	1731	C	PHE	B	201	78.776	24.559	10.286	1.00	17.94
ATOM	1732	O	PHE	B	201	78.122	23.823	9.549	1.00	17.49
ATOM	1733	CB	PHE	B	201	78.052	26.786	11.104	1.00	21.73
ATOM	1734	CG	PHE	B	201	78.189	28.257	11.034	1.00	26.09
ATOM	1735	CD1	PHE	B	201	78.983	28.920	11.946	1.00	30.67
ATOM	1736	CD2	PHE	B	201	77.552	28.984	10.042	1.00	30.87
ATOM	1737	CE1	PHE	B	201	79.152	30.293	11.872	1.00	35.06
ATOM	1738	CE2	PHE	B	201	77.719	30.376	9.960	1.00	36.09

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ATOM	1739	CZ	PHE	B	201	78.520	31.025	10.881	1.00	34.93
ATOM	1740	N	GLU	B	202	79.471	24.099	11.306	1.00	18.36
ATOM	1741	CA	GLU	B	202	79.420	22.700	11.649	1.00	17.83
ATOM	1742	C	GLU	B	202	77.978	22.328	11.867	1.00	17.87
ATOM	1743	O	GLU	B	202	77.074	23.114	11.600	1.00	24.44
ATOM	1744	CB	GLU	B	202	80.190	22.460	12.916	1.00	20.20
ATOM	1745	CG	GLU	B	202	81.641	22.777	12.745	1.00	28.31
ATOM	1746	CD	GLU	B	202	82.401	22.608	14.029	1.00	40.47
ATOM	1747	OE1	GLU	B	202	81.769	22.584	15.120	1.00	43.21
ATOM	1748	OE2	GLU	B	202	83.644	22.498	13.947	1.00	47.19
ATOM	1749	N	ARG	B	203	77.761	21.136	12.382	1.00	11.87
ATOM	1750	CA	ARG	B	203	76.419	20.653	12.584	1.00	11.57
ATOM	1751	C	ARG	B	203	76.514	19.196	13.060	1.00	12.27
ATOM	1752	O	ARG	B	203	77.459	18.472	12.738	1.00	14.10
ATOM	1753	CB	ARG	B	203	75.639	20.789	11.262	1.00	6.52
ATOM	1754	CG	ARG	B	203	74.507	19.805	11.065	1.00	23.84
ATOM	1755	CD	ARG	B	203	73.179	20.461	10.566	1.00	33.66
ATOM	1756	NE	ARG	B	203	72.034	19.540	10.715	1.00	45.05
ATOM	1757	CZ	ARG	B	203	71.339	19.325	11.847	1.00	48.31
ATOM	1758	NH1	ARG	B	203	71.635	19.987	12.967	1.00	47.90
ATOM	1759	NH2	ARG	B	203	70.346	18.430	11.865	1.00	47.68
ATOM	1760	N	ILE	B	204	75.550	18.781	13.867	1.00	11.15
ATOM	1761	CA	ILE	B	204	75.544	17.439	14.379	1.00	3.57
ATOM	1762	C	ILE	B	204	74.543	16.591	13.616	1.00	6.13
ATOM	1763	O	ILE	B	204	73.398	17.002	13.389	1.00	3.17
ATOM	1764	CB	ILE	B	204	75.146	17.431	15.810	1.00	2.00
ATOM	1765	CG1	ILE	B	204	76.130	18.280	16.628	1.00	2.00
ATOM	1766	CG2	ILE	B	204	74.968	15.987	16.240	1.00	2.00
ATOM	1767	CD1	ILE	B	204	76.253	17.826	18.106	1.00	2.00
ATOM	1768	N	LEU	B	205	75.001	15.417	13.200	1.00	6.81
ATOM	1769	CA	LEU	B	205	74.159	14.479	12.483	1.00	5.08
ATOM	1770	C	LEU	B	205	73.630	13.383	13.426	1.00	5.34
ATOM	1771	O	LEU	B	205	72.446	13.216	13.498	1.00	8.95
ATOM	1772	CB	LEU	B	205	74.920	13.870	11.317	1.00	4.18
ATOM	1773	CG	LEU	B	205	75.352	14.792	10.184	1.00	2.00
ATOM	1774	CD1	LEU	B	205	75.791	13.925	9.035	1.00	2.00
ATOM	1775	CD2	LEU	B	205	74.240	15.634	9.677	1.00	2.00
ATOM	1776	N	LEU	B	206	74.476	12.644	14.141	1.00	2.00
ATOM	1777	CA	LEU	B	206	73.997	11.641	15.073	1.00	2.00
ATOM	1778	C	LEU	B	206	74.665	11.830	16.422	1.00	2.12
ATOM	1779	O	LEU	B	206	75.572	12.633	16.559	1.00	4.64
ATOM	1780	CB	LEU	B	206	74.317	10.242	14.611	1.00	2.00
ATOM	1781	CG	LEU	B	206	73.795	9.590	13.351	1.00	2.79
ATOM	1782	CD1	LEU	B	206	73.033	10.522	12.448	1.00	2.00
ATOM	1783	CD2	LEU	B	206	75.050	9.047	12.673	1.00	16.30
ATOM	1784	N	ARG	B	207	74.203	11.103	17.433	1.00	4.00
ATOM	1785	CA	ARG	B	207	74.781	11.201	18.769	1.00	6.44
ATOM	1786	C	ARG	B	207	74.279	10.048	19.599	1.00	7.80
ATOM	1787	O	ARG	B	207	73.108	9.700	19.506	1.00	16.31
ATOM	1788	CB	ARG	B	207	74.332	12.473	19.456	1.00	7.43
ATOM	1789	CG	ARG	B	207	75.265	13.602	19.339	1.00	12.72
ATOM	1790	CD	ARG	B	207	74.644	14.756	20.036	1.00	15.92
ATOM	1791	NE	ARG	B	207	75.457	15.275	21.120	1.00	19.40
ATOM	1792	CZ	ARG	B	207	74.992	16.118	22.023	1.00	23.80
ATOM	1793	NH1	ARG	B	207	73.724	16.523	21.948	1.00	34.58
ATOM	1794	NH2	ARG	B	207	75.787	16.579	22.977	1.00	25.74
ATOM	1795	N	ALA	B	208	75.160	9.452	20.393	1.00	6.83
ATOM	1796	CA	ALA	B	208	74.813	8.335	21.253	1.00	3.90
ATOM	1797	C	ALA	B	208	75.304	8.746	22.597	1.00	7.22
ATOM	1798	O	ALA	B	208	76.079	9.698	22.697	1.00	6.83

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ATOM	1799	CB	ALA	B	208	75.496	7.104	20.809	1.00	2.00
ATOM	1800	N	ALA	B	209	74.808	8.100	23.640	1.00	14.21
ATOM	1801	CA	ALA	B	209	75.240	8.489	24.978	1.00	23.50
ATOM	1802	C	ALA	B	209	74.836	7.512	26.065	1.00	27.52
ATOM	1803	O	ALA	B	209	73.645	7.178	26.228	1.00	28.86
ATOM	1804	CB	ALA	B	209	74.698	9.929	25.341	1.00	15.95
ATOM	1805	N	ASN	B	210	75.846	7.086	26.825	1.00	27.42
ATOM	1806	CA	ASN	B	210	75.647	6.172	27.926	1.00	25.46
ATOM	1807	C	ASN	B	210	76.001	6.797	29.230	1.00	23.92
ATOM	1808	O	ASN	B	210	76.493	7.914	29.283	1.00	17.37
ATOM	1809	CB	ASN	B	210	76.455	4.911	27.722	1.00	26.40
ATOM	1810	CG	ASN	B	210	75.902	4.077	26.584	1.00	34.36
ATOM	1811	OD1	ASN	B	210	75.603	4.617	25.487	1.00	33.21
ATOM	1812	ND2	ASN	B	210	75.741	2.762	26.826	1.00	30.48
ATOM	1813	N	THR	B	211	75.703	6.071	30.294	1.00	27.40
ATOM	1814	CA	THR	B	211	75.996	6.546	31.627	1.00	31.18
ATOM	1815	C	THR	B	211	77.051	5.696	32.297	1.00	35.66
ATOM	1816	O	THR	B	211	76.797	4.528	32.630	1.00	36.24
ATOM	1817	CB	THR	B	211	74.770	6.519	32.457	1.00	26.47
ATOM	1818	OG1	THR	B	211	73.651	6.489	31.582	1.00	21.45
ATOM	1819	CG2	THR	B	211	74.696	7.768	33.319	1.00	32.05
ATOM	1820	N	HIS	B	212	78.219	6.312	32.514	1.00	39.27
ATOM	1821	CA	HIS	B	212	79.382	5.661	33.127	1.00	42.15
ATOM	1822	C	HIS	B	212	79.037	4.532	34.073	1.00	42.02
ATOM	1823	O	HIS	B	212	78.226	4.684	34.990	1.00	41.60
ATOM	1824	CB	HIS	B	212	80.270	6.693	33.853	1.00	41.38
ATOM	1825	CG	HIS	B	212	80.804	7.764	32.942	1.00	42.63
ATOM	1826	ND1	HIS	B	212	80.787	9.105	33.274	1.00	44.28
ATOM	1827	CD2	HIS	B	212	81.303	7.698	31.690	1.00	39.41
ATOM	1828	CE1	HIS	B	212	81.256	9.814	32.265	1.00	37.85
ATOM	1829	NE2	HIS	B	212	81.577	8.984	31.290	1.00	39.23
ATOM	1830	N	SER	B	213	79.661	3.388	33.827	1.00	41.29
ATOM	1831	CA	SER	B	213	79.445	2.217	34.643	1.00	42.04
ATOM	1832	C	SER	B	213	80.272	2.395	35.900	1.00	42.95
ATOM	1833	O	SER	B	213	80.956	3.398	36.046	1.00	44.64
ATOM	1834	CB	SER	B	213	79.901	0.984	33.886	1.00	42.15
ATOM	1835	OG	SER	B	213	81.123	0.519	34.411	1.00	42.34
ATOM	1836	N	SER	B	214	80.200	1.442	36.818	1.00	44.84
ATOM	1837	CA	SER	B	214	80.977	1.535	38.050	1.00	48.54
ATOM	1838	C	SER	B	214	82.262	0.757	37.882	1.00	47.97
ATOM	1839	O	SER	B	214	83.321	1.171	38.347	1.00	52.13
ATOM	1840	CB	SER	B	214	80.212	0.938	39.228	1.00	53.97
ATOM	1841	OG	SER	B	214	80.355	-0.480	39.257	1.00	62.76
ATOM	1842	N	ALA	B	215	82.143	-0.383	37.221	1.00	42.83
ATOM	1843	CA	ALA	B	215	83.263	-1.263	36.983	1.00	41.03
ATOM	1844	C	ALA	B	215	84.628	-0.618	37.178	1.00	40.16
ATOM	1845	O	ALA	B	215	85.037	0.215	36.383	1.00	42.00
ATOM	1846	CB	ALA	B	215	83.160	-1.843	35.576	1.00	44.75
ATOM	1847	N	LYS	B	216	85.326	-0.980	38.248	1.00	38.82
ATOM	1848	CA	LYS	B	216	86.657	-0.443	38.467	1.00	41.15
ATOM	1849	C	LYS	B	216	87.658	-1.331	37.719	1.00	41.70
ATOM	1850	O	LYS	B	216	87.453	-2.539	37.570	1.00	42.69
ATOM	1851	CB	LYS	B	216	86.981	-0.393	39.954	1.00	40.21
ATOM	1852	CG	LYS	B	216	86.314	0.773	40.671	1.00	50.50
ATOM	1853	CD	LYS	B	216	87.047	2.115	40.460	1.00	56.23
ATOM	1854	CE	LYS	B	216	86.528	3.222	41.435	1.00	60.94
ATOM	1855	NZ	LYS	B	216	86.782	4.642	40.993	1.00	57.76
ATOM	1856	N	PRO	B	217	88.752	-0.739	37.222	1.00	40.23
ATOM	1857	CA	PRO	B	217	89.098	0.687	37.322	1.00	39.28
ATOM	1858	C	PRO	B	217	88.120	1.445	36.431	1.00	35.97

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ATOM	1859	O	PRO	B	217	87.750	2.599	36.694	1.00	36.60
ATOM	1860	CB	PRO	B	217	90.514	0.740	36.783	1.00	41.24
ATOM	1861	CG	PRO	B	217	90.529	-0.407	35.799	1.00	42.73
ATOM	1862	CD	PRO	B	217	89.740	-1.490	36.436	1.00	37.64
ATOM	1863	N	CYS	B	218	87.739	0.782	35.346	1.00	28.56
ATOM	1864	CA	CYS	B	218	86.758	1.332	34.429	1.00	25.16
ATOM	1865	C	CYS	B	218	86.025	0.164	33.779	1.00	19.75
ATOM	1866	O	CYS	B	218	86.546	-0.950	33.726	1.00	18.35
ATOM	1867	CB	CYS	B	218	87.404	2.220	33.354	1.00	23.23
ATOM	1868	SG	CYS	B	218	88.470	1.291	32.234	1.00	16.39
ATOM	1869	N	GLY	B	219	84.800	0.424	33.330	1.00	13.86
ATOM	1870	CA	GLY	B	219	83.999	-0.597	32.684	1.00	9.45
ATOM	1871	C	GLY	B	219	83.759	-0.072	31.290	1.00	10.00
ATOM	1872	O	GLY	B	219	83.365	1.077	31.095	1.00	13.10
ATOM	1873	N	GLN	B	220	84.050	-0.896	30.305	1.00	10.85
ATOM	1874	CA	GLN	B	220	83.878	-0.490	28.931	1.00	10.42
ATOM	1875	C	GLN	B	220	82.410	-0.501	28.613	1.00	11.04
ATOM	1876	O	GLN	B	220	81.637	-1.098	29.333	1.00	17.45
ATOM	1877	CB	GLN	B	220	84.588	-1.462	28.013	1.00	12.16
ATOM	1878	CG	GLN	B	220	86.078	-1.288	27.881	1.00	9.82
ATOM	1879	CD	GLN	B	220	86.623	-2.434	27.076	1.00	17.62
ATOM	1880	OE1	GLN	B	220	86.663	-3.552	27.580	1.00	23.68
ATOM	1881	NE2	GLN	B	220	87.025	-2.190	25.810	1.00	18.63
ATOM	1882	N	GLN	B	221	82.049	0.135	27.512	1.00	9.49
ATOM	1883	CA	GLN	B	221	80.683	0.230	27.061	1.00	7.34
ATOM	1884	C	GLN	B	221	80.818	0.654	25.604	1.00	12.05
ATOM	1885	O	GLN	B	221	81.628	1.549	25.293	1.00	11.14
ATOM	1886	CB	GLN	B	221	80.030	1.346	27.816	1.00	10.15
ATOM	1887	CG	GLN	B	221	79.383	0.973	29.098	1.00	23.28
ATOM	1888	CD	GLN	B	221	78.195	1.884	29.376	1.00	37.18
ATOM	1889	OE1	GLN	B	221	77.012	1.477	29.244	1.00	48.79
ATOM	1890	NE2	GLN	B	221	78.494	3.138	29.748	1.00	37.40
ATOM	1891	N	SER	B	222	80.013	0.078	24.712	1.00	14.37
ATOM	1892	CA	SER	B	222	80.133	0.439	23.297	1.00	15.44
ATOM	1893	C	SER	B	222	79.044	1.353	22.794	1.00	15.97
ATOM	1894	O	SER	B	222	78.020	1.487	23.422	1.00	22.88
ATOM	1895	CB	SER	B	222	80.196	-0.802	22.428	1.00	20.19
ATOM	1896	OG	SER	B	222	81.527	-1.297	22.395	1.00	24.58
ATOM	1897	N	ILE	B	223	79.270	1.991	21.658	1.00	13.93
ATOM	1898	CA	ILE	B	223	78.310	2.939	21.099	1.00	8.63
ATOM	1899	C	ILE	B	223	78.320	2.781	19.593	1.00	10.31
ATOM	1900	O	ILE	B	223	79.353	2.483	19.046	1.00	20.06
ATOM	1901	CB	ILE	B	223	78.759	4.339	21.438	1.00	5.65
ATOM	1902	CG1	ILE	B	223	77.891	4.877	22.564	1.00	16.29
ATOM	1903	CG2	ILE	B	223	78.777	5.197	20.189	1.00	2.00
ATOM	1904	CD1	ILE	B	223	78.343	6.235	23.129	1.00	24.95
ATOM	1905	N	HIS	B	224	77.211	2.995	18.911	1.00	9.08
ATOM	1906	CA	HIS	B	224	77.199	2.830	17.469	1.00	8.33
ATOM	1907	C	HIS	B	224	76.219	3.748	16.756	1.00	13.57
ATOM	1908	O	HIS	B	224	75.051	3.783	17.120	1.00	20.02
ATOM	1909	CB	HIS	B	224	76.816	1.409	17.167	1.00	9.68
ATOM	1910	CG	HIS	B	224	76.980	1.033	15.739	1.00	15.80
ATOM	1911	ND1	HIS	B	224	77.931	0.128	15.311	1.00	13.54
ATOM	1912	CD2	HIS	B	224	76.311	1.435	14.629	1.00	14.33
ATOM	1913	CE1	HIS	B	224	77.834	-0.021	14.008	1.00	16.34
ATOM	1914	NE2	HIS	B	224	76.861	0.765	13.567	1.00	15.53
ATOM	1915	N	LEU	B	225	76.659	4.477	15.730	1.00	13.45
ATOM	1916	CA	LEU	B	225	75.723	5.341	15.028	1.00	10.17
ATOM	1917	C	LEU	B	225	75.874	5.373	13.544	1.00	7.41
ATOM	1918	O	LEU	B	225	76.904	5.764	13.082	1.00	17.67

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ATOM	1919	CB	LEU	B	225	75.845	6.761	15.514	1.00	8.21
ATOM	1920	CG	LEU	B	225	76.977	7.052	16.453	1.00	8.38
ATOM	1921	CD1	LEU	B	225	77.789	8.089	15.774	1.00	13.65
ATOM	1922	CD2	LEU	B	225	76.476	7.593	17.756	1.00	11.62
ATOM	1923	N	GLY	B	226	74.821	5.028	12.815	1.00	2.45
ATOM	1924	CA	GLY	B	226	74.843	5.026	11.371	1.00	3.03
ATOM	1925	C	GLY	B	226	73.871	6.076	10.852	1.00	8.45
ATOM	1926	O	GLY	B	226	73.696	7.125	11.486	1.00	12.80
ATOM	1927	N	GLY	B	227	73.286	5.826	9.678	1.00	6.13
ATOM	1928	CA	GLY	B	227	72.326	6.732	9.088	1.00	8.65
ATOM	1929	C	GLY	B	227	72.769	7.287	7.747	1.00	9.98
ATOM	1930	O	GLY	B	227	73.906	7.703	7.597	1.00	13.65
ATOM	1931	N	VAL	B	228	71.849	7.347	6.792	1.00	9.57
ATOM	1932	CA	VAL	B	228	72.145	7.823	5.460	1.00	7.33
ATOM	1933	C	VAL	B	228	71.969	9.310	5.366	1.00	14.51
ATOM	1934	O	VAL	B	228	70.983	9.850	5.850	1.00	22.99
ATOM	1935	CB	VAL	B	228	71.209	7.273	4.481	1.00	2.00
ATOM	1936	CG1	VAL	B	228	71.254	8.120	3.247	1.00	2.00
ATOM	1937	CG2	VAL	B	228	71.541	5.839	4.230	1.00	7.50
ATOM	1938	N	PHE	B	229	72.917	9.959	4.707	1.00	13.99
ATOM	1939	CA	PHE	B	229	72.886	11.381	4.532	1.00	6.51
ATOM	1940	C	PHE	B	229	73.318	11.713	3.168	1.00	6.62
ATOM	1941	O	PHE	B	229	73.908	10.948	2.460	1.00	8.15
ATOM	1942	CB	PHE	B	229	73.798	12.007	5.533	1.00	2.02
ATOM	1943	CG	PHE	B	229	73.428	11.693	6.924	1.00	2.00
ATOM	1944	CD1	PHE	B	229	72.622	12.537	7.628	1.00	5.48
ATOM	1945	CD2	PHE	B	229	73.962	10.611	7.562	1.00	6.72
ATOM	1946	CE1	PHE	B	229	72.377	12.312	8.950	1.00	8.02
ATOM	1947	CE2	PHE	B	229	73.715	10.386	8.895	1.00	10.10
ATOM	1948	CZ	PHE	B	229	72.931	11.238	9.581	1.00	7.25
ATOM	1949	N	GLU	B	230	72.986	12.960	2.792	1.00	12.70
ATOM	1950	CA	GLU	B	230	73.372	13.493	1.503	1.00	14.49
ATOM	1951	C	GLU	B	230	74.495	14.532	1.799	1.00	13.79
ATOM	1952	O	GLU	B	230	74.302	15.483	2.589	1.00	7.76
ATOM	1953	CB	GLU	B	230	72.156	14.133	0.849	1.00	16.85
ATOM	1954	CG	GLU	B	230	72.419	14.673	-0.515	1.00	31.87
ATOM	1955	CD	GLU	B	230	71.239	14.440	-1.420	1.00	41.16
ATOM	1956	OE1	GLU	B	230	71.458	14.275	-2.648	1.00	49.81
ATOM	1957	OE2	GLU	B	230	70.095	14.414	-0.891	1.00	41.13
ATOM	1958	N	LEU	B	231	75.673	14.322	1.201	1.00	9.30
ATOM	1959	CA	LEU	B	231	76.777	15.219	1.418	1.00	5.17
ATOM	1960	C	LEU	B	231	77.002	16.101	0.205	1.00	7.83
ATOM	1961	O	LEU	B	231	76.828	15.705	-0.945	1.00	7.46
ATOM	1962	CB	LEU	B	231	78.027	14.435	1.772	1.00	2.00
ATOM	1963	CG	LEU	B	231	77.768	13.528	2.963	1.00	6.59
ATOM	1964	CD1	LEU	B	231	78.967	12.736	3.367	1.00	2.78
ATOM	1965	CD2	LEU	B	231	77.349	14.405	4.102	1.00	11.73
ATOM	1966	N	GLN	B	232	77.335	17.345	0.480	1.00	10.72
ATOM	1967	CA	GLN	B	232	77.609	18.281	-0.576	1.00	12.75
ATOM	1968	C	GLN	B	232	79.072	18.010	-0.983	1.00	11.42
ATOM	1969	O	GLN	B	232	79.899	17.627	-0.139	1.00	5.52
ATOM	1970	CB	GLN	B	232	77.457	19.678	0.003	1.00	20.95
ATOM	1971	CG	GLN	B	232	76.097	20.263	-0.173	1.00	26.53
ATOM	1972	CD	GLN	B	232	75.655	20.229	-1.606	1.00	33.80
ATOM	1973	OE1	GLN	B	232	76.157	20.992	-2.441	1.00	38.98
ATOM	1974	NE2	GLN	B	232	74.698	19.351	-1.908	1.00	40.30
ATOM	1975	N	PRO	B	233	79.446	18.267	-2.250	1.00	11.44
ATOM	1976	CA	PRO	B	233	80.854	17.985	-2.583	1.00	9.90
ATOM	1977	C	PRO	B	233	81.760	18.853	-1.750	1.00	6.72
ATOM	1978	O	PRO	B	233	81.574	20.054	-1.745	1.00	8.47

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ATOM	1979	CB	PRO B 233	80.971	18.373	-4.041	1.00	6.48
ATOM	1980	CG	PRO B 233	79.961	19.433	-4.208	1.00	11.42
ATOM	1981	CD	PRO B 233	78.763	18.908	-3.382	1.00	13.20
ATOM	1982	N	GLY B 234	82.736	18.253	-1.067	1.00	5.32
ATOM	1983	CA	GLY B 234	83.643	19.031	-0.248	1.00	3.21
ATOM	1984	C	GLY B 234	83.303	18.771	1.181	1.00	10.69
ATOM	1985	O	GLY B 234	83.984	19.230	2.099	1.00	16.63
ATOM	1986	N	ALA B 235	82.214	18.035	1.365	1.00	14.61
ATOM	1987	CA	ALA B 235	81.717	17.682	2.696	1.00	14.27
ATOM	1988	C	ALA B 235	82.735	16.950	3.516	1.00	11.21
ATOM	1989	O	ALA B 235	83.515	16.186	2.974	1.00	13.90
ATOM	1990	CB	ALA B 235	80.474	16.803	2.567	1.00	19.17
ATOM	1991	N	SER B 236	82.680	17.105	4.826	1.00	9.48
ATOM	1992	CA	SER B 236	83.639	16.396	5.661	1.00	11.22
ATOM	1993	C	SER B 236	83.094	16.082	7.075	1.00	7.30
ATOM	1994	O	SER B 236	82.539	16.947	7.749	1.00	5.99
ATOM	1995	CB	SER B 236	84.941	17.222	5.679	1.00	14.78
ATOM	1996	OG	SER B 236	85.451	17.456	6.969	1.00	21.36
ATOM	1997	N	VAL B 237	83.243	14.844	7.522	1.00	4.25
ATOM	1998	CA	VAL B 237	82.722	14.475	8.828	1.00	2.64
ATOM	1999	C	VAL B 237	83.685	14.092	9.934	1.00	2.00
ATOM	2000	O	VAL B 237	84.727	13.582	9.687	1.00	8.90
ATOM	2001	CB	VAL B 237	81.681	13.370	8.646	1.00	2.00
ATOM	2002	CG1	VAL B 237	80.572	13.953	7.825	1.00	2.00
ATOM	2003	CG2	VAL B 237	82.263	12.119	8.001	1.00	2.00
ATOM	2004	N	PHE B 238	83.312	14.285	11.173	1.00	2.00
ATOM	2005	CA	PHE B 238	84.204	13.925	12.253	1.00	4.62
ATOM	2006	C	PHE B 238	83.487	13.402	13.517	1.00	8.48
ATOM	2007	O	PHE B 238	82.394	13.846	13.849	1.00	12.96
ATOM	2008	CB	PHE B 238	85.050	15.133	12.607	1.00	2.00
ATOM	2009	CG	PHE B 238	84.262	16.318	13.008	1.00	2.00
ATOM	2010	CD1	PHE B 238	83.610	17.099	12.070	1.00	2.00
ATOM	2011	CD2	PHE B 238	84.244	16.708	14.322	1.00	2.00
ATOM	2012	CE1	PHE B 238	82.968	18.261	12.450	1.00	2.00
ATOM	2013	CE2	PHE B 238	83.613	17.861	14.693	1.00	2.00
ATOM	2014	CZ	PHE B 238	82.977	18.641	13.757	1.00	2.00
ATOM	2015	N	VAL B 239	84.084	12.449	14.220	1.00	10.88
ATOM	2016	CA	VAL B 239	83.492	11.939	15.457	1.00	7.53
ATOM	2017	C	VAL B 239	84.038	12.770	16.602	1.00	11.17
ATOM	2018	O	VAL B 239	85.218	13.046	16.688	1.00	15.33
ATOM	2019	CB	VAL B 239	83.886	10.540	15.739	1.00	2.00
ATOM	2020	CG1	VAL B 239	83.223	10.104	16.977	1.00	2.00
ATOM	2021	CG2	VAL B 239	83.555	9.680	14.559	1.00	2.00
ATOM	2022	N	ASN B 240	83.176	13.146	17.513	1.00	17.73
ATOM	2023	CA	ASN B 240	83.592	13.981	18.612	1.00	13.40
ATOM	2024	C	ASN B 240	83.014	13.395	19.872	1.00	8.46
ATOM	2025	O	ASN B 240	81.869	12.968	19.885	1.00	11.78
ATOM	2026	CB	ASN B 240	83.016	15.359	18.378	1.00	18.22
ATOM	2027	CG	ASN B 240	83.434	16.319	19.411	1.00	27.63
ATOM	2028	OD1	ASN B 240	84.367	16.026	20.176	1.00	26.91
ATOM	2029	ND2	ASN B 240	82.748	17.493	19.469	1.00	29.14
ATOM	2030	N	VAL B 241	83.791	13.311	20.924	1.00	2.09
ATOM	2031	CA	VAL B 241	83.218	12.808	22.141	1.00	2.00
ATOM	2032	C	VAL B 241	83.480	13.717	23.318	1.00	4.46
ATOM	2033	O	VAL B 241	84.148	14.747	23.209	1.00	2.66
ATOM	2034	CB	VAL B 241	83.640	11.396	22.451	1.00	2.00
ATOM	2035	CG1	VAL B 241	83.718	10.671	21.201	1.00	2.64
ATOM	2036	CG2	VAL B 241	84.901	11.362	23.295	1.00	2.45
ATOM	2037	N	THR B 242	82.878	13.363	24.439	1.00	7.17
ATOM	2038	CA	THR B 242	83.013	14.182	25.613	1.00	10.22



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ATOM	2039	C	THR	B	242	84.367	14.059	26.276	1.00	11.20
ATOM	2040	O	THR	B	242	84.887	15.061	26.766	1.00	14.34
ATOM	2041	CB	THR	B	242	81.845	13.901	26.608	1.00	8.81
ATOM	2042	OG1	THR	B	242	82.347	13.394	27.857	1.00	18.88
ATOM	2043	CG2	THR	B	242	80.904	12.885	26.003	1.00	5.23
ATOM	2044	N	ASP	B	243	84.933	12.856	26.318	1.00	8.93
ATOM	2045	CA	ASP	B	243	86.236	12.705	26.933	1.00	8.96
ATOM	2046	C	ASP	B	243	87.014	11.623	26.254	1.00	13.16
ATOM	2047	O	ASP	B	243	86.987	10.449	26.678	1.00	16.76
ATOM	2048	CB	ASP	B	243	86.129	12.351	28.402	1.00	13.26
ATOM	2049	CG	ASP	B	243	87.489	12.136	29.028	1.00	23.17
ATOM	2050	OD1	ASP	B	243	87.578	11.615	30.165	1.00	32.47
ATOM	2051	OD2	ASP	B	243	88.487	12.501	28.361	1.00	27.81
ATOM	2052	N	PRO	B	244	87.767	12.000	25.214	1.00	11.45
ATOM	2053	CA	PRO	B	244	88.548	10.997	24.500	1.00	4.37
ATOM	2054	C	PRO	B	244	89.538	10.311	25.410	1.00	2.00
ATOM	2055	O	PRO	B	244	89.846	9.139	25.233	1.00	8.28
ATOM	2056	CB	PRO	B	244	89.193	11.788	23.399	1.00	2.00
ATOM	2057	CG	PRO	B	244	89.185	13.200	23.927	1.00	8.84
ATOM	2058	CD	PRO	B	244	87.956	13.348	24.661	1.00	9.44
ATOM	2059	N	SER	B	245	89.973	10.999	26.447	1.00	2.00
ATOM	2060	CA	SER	B	245	90.940	10.396	27.340	1.00	2.00
ATOM	2061	C	SER	B	245	90.483	9.056	27.757	1.00	4.70
ATOM	2062	O	SER	B	245	91.182	8.372	28.502	1.00	11.26
ATOM	2063	CB	SER	B	245	91.146	11.215	28.600	1.00	11.05
ATOM	2064	OG	SER	B	245	90.224	10.827	29.611	1.00	21.73
ATOM	2065	N	GLN	B	246	89.298	8.668	27.325	1.00	8.48
ATOM	2066	CA	GLN	B	246	88.854	7.364	27.725	1.00	10.67
ATOM	2067	C	GLN	B	246	88.064	6.551	26.756	1.00	8.07
ATOM	2068	O	GLN	B	246	87.369	5.633	27.192	1.00	4.71
ATOM	2069	CB	GLN	B	246	88.117	7.416	29.039	1.00	15.08
ATOM	2070	CG	GLN	B	246	86.863	8.242	28.953	1.00	23.80
ATOM	2071	CD	GLN	B	246	86.478	8.792	30.302	1.00	26.96
ATOM	2072	OE1	GLN	B	246	85.312	9.121	30.542	1.00	21.69
ATOM	2073	NE2	GLN	B	246	87.468	8.891	31.205	1.00	25.52
ATOM	2074	N	VAL	B	247	88.166	6.865	25.462	1.00	2.86
ATOM	2075	CA	VAL	B	247	87.539	5.990	24.502	1.00	5.17
ATOM	2076	C	VAL	B	247	88.490	4.742	24.439	1.00	8.47
ATOM	2077	O	VAL	B	247	89.665	4.826	24.709	1.00	15.40
ATOM	2078	CB	VAL	B	247	87.440	6.580	23.127	1.00	4.08
ATOM	2079	CG1	VAL	B	247	87.840	8.035	23.143	1.00	2.00
ATOM	2080	CG2	VAL	B	247	88.191	5.648	22.156	1.00	5.71
ATOM	2081	N	SER	B	248	88.005	3.571	24.100	1.00	8.43
ATOM	2082	CA	SER	B	248	88.893	2.422	24.091	1.00	9.81
ATOM	2083	C	SER	B	248	89.483	2.253	22.699	1.00	8.80
ATOM	2084	O	SER	B	248	88.788	2.534	21.731	1.00	6.91
ATOM	2085	CB	SER	B	248	88.112	1.174	24.483	1.00	10.35
ATOM	2086	OG	SER	B	248	88.214	0.898	25.870	1.00	7.71
ATOM	2087	N	HIS	B	249	90.750	1.811	22.619	1.00	10.93
ATOM	2088	CA	HIS	B	249	91.464	1.617	21.358	1.00	4.74
ATOM	2089	C	HIS	B	249	91.915	0.226	21.038	1.00	4.68
ATOM	2090	O	HIS	B	249	92.447	0.000	19.943	1.00	9.07
ATOM	2091	CB	HIS	B	249	92.679	2.483	21.326	1.00	2.00
ATOM	2092	CG	HIS	B	249	92.373	3.924	21.226	1.00	2.00
ATOM	2093	ND1	HIS	B	249	91.972	4.506	20.052	1.00	2.00
ATOM	2094	CD2	HIS	B	249	92.450	4.908	22.146	1.00	2.00
ATOM	2095	CE1	HIS	B	249	91.797	5.798	20.244	1.00	3.14
ATOM	2096	NE2	HIS	B	249	92.085	6.067	21.510	1.00	9.98
ATOM	2097	N	GLY	B	250	91.726	-0.698	21.971	1.00	3.21
ATOM	2098	CA	GLY	B	250	92.116	-2.065	21.701	1.00	2.22

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ATOM	2099	C	GLY	B	250	91.691	-2.401	20.275	1.00	4.50
ATOM	2100	O	GLY	B	250	90.762	-1.815	19.697	1.00	2.68
ATOM	2101	N	THR	B	251	92.379	-3.335	19.653	1.00	5.81
ATOM	2102	CA	THR	B	251	91.994	-3.647	18.299	1.00	4.79
ATOM	2103	C	THR	B	251	90.500	-3.934	18.207	1.00	5.66
ATOM	2104	O	THR	B	251	89.925	-4.594	19.081	1.00	7.21
ATOM	2105	CB	THR	B	251	92.814	-4.844	17.761	1.00	2.00
ATOM	2106	OG1	THR	B	251	91.958	-5.782	17.092	1.00	2.00
ATOM	2107	CG2	THR	B	251	93.516	-5.515	18.878	1.00	2.00
ATOM	2108	N	GLY	B	252	89.886	-3.409	17.157	1.00	2.00
ATOM	2109	CA	GLY	B	252	88.489	-3.670	16.904	1.00	7.81
ATOM	2110	C	GLY	B	252	87.422	-2.897	17.640	1.00	12.34
ATOM	2111	O	GLY	B	252	86.243	-2.949	17.272	1.00	17.06
ATOM	2112	N	PHE	B	253	87.820	-2.147	18.648	1.00	13.10
ATOM	2113	CA	PHE	B	253	86.845	-1.414	19.454	1.00	14.57
ATOM	2114	C	PHE	B	253	86.241	-0.126	18.884	1.00	15.80
ATOM	2115	O	PHE	B	253	85.039	-0.056	18.699	1.00	18.04
ATOM	2116	CB	PHE	B	253	87.472	-1.112	20.788	1.00	15.65
ATOM	2117	CG	PHE	B	253	87.400	-2.247	21.751	1.00	12.17
ATOM	2118	CD1	PHE	B	253	86.189	-2.755	22.113	1.00	15.61
ATOM	2119	CD2	PHE	B	253	88.543	-2.737	22.376	1.00	5.14
ATOM	2120	CE1	PHE	B	253	86.118	-3.728	23.096	1.00	19.94
ATOM	2121	CE2	PHE	B	253	88.466	-3.704	23.355	1.00	8.13
ATOM	2122	CZ	PHE	B	253	87.267	-4.196	23.720	1.00	13.04
ATOM	2123	N	THR	B	254	87.065	0.884	18.607	1.00	11.78
ATOM	2124	CA	THR	B	254	86.576	2.152	18.046	1.00	8.69
ATOM	2125	C	THR	B	254	86.973	2.377	16.544	1.00	11.32
ATOM	2126	O	THR	B	254	88.152	2.425	16.211	1.00	11.07
ATOM	2127	CB	THR	B	254	87.123	3.327	18.834	1.00	5.48
ATOM	2128	OG1	THR	B	254	86.758	3.200	20.210	1.00	2.00
ATOM	2129	CG2	THR	B	254	86.608	4.624	18.247	1.00	2.00
ATOM	2130	N	SER	B	255	85.992	2.524	15.657	1.00	8.21
ATOM	2131	CA	SER	B	255	86.232	2.733	14.226	1.00	8.18
ATOM	2132	C	SER	B	255	85.336	3.833	13.740	1.00	9.74
ATOM	2133	O	SER	B	255	84.511	4.325	14.487	1.00	17.06
ATOM	2134	CB	SER	B	255	85.897	1.486	13.427	1.00	9.93
ATOM	2135	OG	SER	B	255	85.070	0.634	14.187	1.00	21.95
ATOM	2136	N	PHE	B	256	85.467	4.197	12.477	1.00	7.06
ATOM	2137	CA	PHE	B	256	84.682	5.290	11.921	1.00	7.12
ATOM	2138	C	PHE	B	256	84.735	5.114	10.409	1.00	10.19
ATOM	2139	O	PHE	B	256	85.730	4.609	9.903	1.00	16.12
ATOM	2140	CB	PHE	B	256	85.334	6.586	12.384	1.00	3.04
ATOM	2141	CG	PHE	B	256	84.913	7.802	11.638	1.00	3.09
ATOM	2142	CD1	PHE	B	256	83.580	8.031	11.316	1.00	5.02
ATOM	2143	CD2	PHE	B	256	85.855	8.801	11.378	1.00	2.01
ATOM	2144	CE1	PHE	B	256	83.180	9.270	10.745	1.00	9.86
ATOM	2145	CE2	PHE	B	256	85.494	10.044	10.810	1.00	6.69
ATOM	2146	CZ	PHE	B	256	84.151	10.292	10.492	1.00	10.34
ATOM	2147	N	GLY	B	257	83.676	5.450	9.676	1.00	8.49
ATOM	2148	CA	GLY	B	257	83.733	5.246	8.236	1.00	6.78
ATOM	2149	C	GLY	B	257	82.443	5.511	7.479	1.00	9.04
ATOM	2150	O	GLY	B	257	81.384	5.649	8.080	1.00	11.32
ATOM	2151	N	LEU	B	258	82.532	5.546	6.149	1.00	7.81
ATOM	2152	CA	LEU	B	258	81.399	5.859	5.287	1.00	6.96
ATOM	2153	C	LEU	B	258	81.469	5.224	3.934	1.00	9.42
ATOM	2154	O	LEU	B	258	82.541	5.079	3.376	1.00	18.32
ATOM	2155	CB	LEU	B	258	81.337	7.352	5.040	1.00	2.00
ATOM	2156	CG	LEU	B	258	82.606	7.960	4.462	1.00	2.00
ATOM	2157	CD1	LEU	B	258	82.555	7.849	2.977	1.00	2.00
ATOM	2158	CD2	LEU	B	258	82.707	9.415	4.865	1.00	2.00

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ATOM	2159	N	LEU B 259	80.313	4.917	3.372	1.00	8.29
ATOM	2160	CA	LEU B 259	80.258	4.315	2.065	1.00	6.36
ATOM	2161	C	LEU B 259	79.190	5.039	1.263	1.00	5.96
ATOM	2162	O	LEU B 259	78.152	5.394	1.769	1.00	12.24
ATOM	2163	CB	LEU B 259	79.945	2.841	2.217	1.00	3.71
ATOM	2164	CG	LEU B 259	78.584	2.659	2.842	1.00	5.11
ATOM	2165	CD1	LEU B 259	77.596	2.314	1.754	1.00	9.13
ATOM	2166	CD2	LEU B 259	78.654	1.595	3.892	1.00	2.00
ATOM	2167	N	LYS B 260	79.470	5.280	0.008	1.00	5.52
ATOM	2168	CA	LYS B 260	78.571	5.986	-0.863	1.00	5.47
ATOM	2169	C	LYS B 260	77.718	4.967	-1.654	1.00	10.02
ATOM	2170	O	LYS B 260	78.217	3.916	-2.078	1.00	12.17
ATOM	2171	CB	LYS B 260	79.451	6.843	-1.770	1.00	2.00
ATOM	2172	CG	LYS B 260	78.801	7.440	-2.965	1.00	2.44
ATOM	2173	CD	LYS B 260	79.531	8.700	-3.342	1.00	2.00
ATOM	2174	CE	LYS B 260	78.785	9.342	-4.471	1.00	9.05
ATOM	2175	NZ	LYS B 260	78.289	8.357	-5.483	1.00	15.95
ATOM	2176	N	LEU B 261	76.433	5.268	-1.827	1.00	10.81
ATOM	2177	CA	LEU B 261	75.524	4.395	-2.556	1.00	11.54
ATOM	2178	C	LEU B 261	75.492	4.702	-4.051	1.00	16.61
ATOM	2179	O	LEU B 261	75.606	5.907	-4.396	1.00	16.55
ATOM	2180	CB	LEU B 261	74.126	4.530	-1.963	1.00	15.31
ATOM	2181	CG	LEU B 261	74.099	5.172	-0.569	1.00	20.03
ATOM	2182	CD1	LEU B 261	72.682	5.223	0.033	1.00	22.93
ATOM	2183	CD2	LEU B 261	75.025	4.362	0.336	1.00	23.51
ATOM	2184	OT	LEU B 261	75.351	3.737	-4.853	1.00	20.79
ATOM	2185	N	ASN C 119	74.611	-6.165	-10.631	0.00	35.61
ATOM	2186	CA	ASN C 119	73.225	-6.644	-10.900	0.00	34.20
ATOM	2187	C	ASN C 119	72.752	-7.645	-9.850	0.00	29.04
ATOM	2188	O	ASN C 119	71.663	-7.509	-9.297	0.00	30.02
ATOM	2189	CB	ASN C 119	73.148	-7.284	-12.291	0.00	40.99
ATOM	2190	CG	ASN C 119	71.878	-6.915	-13.030	0.00	46.10
ATOM	2191	OD1	ASN C 119	70.918	-7.686	-13.060	0.00	49.61
ATOM	2192	ND2	ASN C 119	71.865	-5.731	-13.631	0.00	49.61
ATOM	2193	N	PRO C 120	73.567	-8.669	-9.561	1.00	22.48
ATOM	2194	CA	PRO C 120	73.152	-9.667	-8.550	1.00	17.08
ATOM	2195	C	PRO C 120	73.423	-9.152	-7.176	1.00	10.45
ATOM	2196	O	PRO C 120	74.565	-8.977	-6.805	1.00	14.24
ATOM	2197	CB	PRO C 120	74.007	-10.900	-8.848	1.00	4.75
ATOM	2198	CG	PRO C 120	75.219	-10.305	-9.402	1.00	22.05
ATOM	2199	CD	PRO C 120	74.887	-8.978	-10.121	1.00	20.94
ATOM	2200	N	GLN C 121	72.389	-8.905	-6.405	1.00	7.54
ATOM	2201	CA	GLN C 121	72.657	-8.413	-5.079	1.00	10.61
ATOM	2202	C	GLN C 121	73.148	-9.552	-4.166	1.00	7.09
ATOM	2203	O	GLN C 121	72.693	-10.696	-4.254	1.00	6.20
ATOM	2204	CB	GLN C 121	71.411	-7.716	-4.551	1.00	14.71
ATOM	2205	CG	GLN C 121	70.701	-6.974	-5.643	1.00	25.02
ATOM	2206	CD	GLN C 121	70.647	-5.501	-5.356	1.00	36.78
ATOM	2207	OE1	GLN C 121	71.685	-4.844	-5.203	1.00	43.10
ATOM	2208	NE2	GLN C 121	69.437	-4.964	-5.266	1.00	43.69
ATOM	2209	N	ILE C 122	74.164	-9.272	-3.362	1.00	4.45
ATOM	2210	CA	ILE C 122	74.647	-10.300	-2.439	1.00	4.96
ATOM	2211	C	ILE C 122	74.483	-9.736	-1.052	1.00	6.28
ATOM	2212	O	ILE C 122	75.072	-8.709	-0.701	1.00	5.08
ATOM	2213	CB	ILE C 122	76.164	-10.660	-2.632	1.00	6.82
ATOM	2214	CG1	ILE C 122	76.384	-11.524	-3.889	1.00	8.88
ATOM	2215	CG2	ILE C 122	76.678	-11.395	-1.395	1.00	2.00
ATOM	2216	CD1	ILE C 122	76.942	-10.744	-5.061	1.00	2.00
ATOM	2217	N	ALA C 123	73.662	-10.399	-0.258	1.00	7.86
ATOM	2218	CA	ALA C 123	73.433	-9.913	1.075	1.00	3.33

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ATOM	2219	C	ALA	C	123	73.010	-11.092	1.859	1.00	3.50
ATOM	2220	O	ALA	C	123	72.645	-12.125	1.271	1.00	2.00
ATOM	2221	CB	ALA	C	123	72.331	-8.925	1.032	1.00	8.76
ATOM	2222	N	ALA	C	124	73.029	-10.933	3.179	1.00	2.00
ATOM	2223	CA	ALA	C	124	72.611	-12.018	4.042	1.00	4.58
ATOM	2224	C	ALA	C	124	72.332	-11.593	5.423	1.00	9.85
ATOM	2225	O	ALA	C	124	73.214	-10.992	6.055	1.00	12.22
ATOM	2226	CB	ALA	C	124	73.639	-13.145	4.100	1.00	2.00
ATOM	2227	N	HIS	C	125	71.115	-11.935	5.887	1.00	9.67
ATOM	2228	CA	HIS	C	125	70.710	-11.671	7.258	1.00	7.50
ATOM	2229	C	HIS	C	125	70.382	-13.030	7.807	1.00	5.43
ATOM	2230	O	HIS	C	125	69.550	-13.692	7.240	1.00	6.70
ATOM	2231	CB	HIS	C	125	69.471	-10.779	7.359	1.00	7.24
ATOM	2232	CG	HIS	C	125	69.240	-10.263	8.745	1.00	2.91
ATOM	2233	ND1	HIS	C	125	70.057	-9.328	9.333	1.00	7.33
ATOM	2234	CD2	HIS	C	125	68.353	-10.625	9.694	1.00	2.00
ATOM	2235	CE1	HIS	C	125	69.688	-9.135	10.585	1.00	2.43
ATOM	2236	NE2	HIS	C	125	68.649	-9.909	10.828	1.00	2.00
ATOM	2237	N	VAL	C	126	71.055	-13.459	8.874	1.00	4.16
ATOM	2238	CA	VAL	C	126	70.786	-14.764	9.486	1.00	4.52
ATOM	2239	C	VAL	C	126	70.406	-14.572	10.973	1.00	5.40
ATOM	2240	O	VAL	C	126	70.903	-13.641	11.647	1.00	3.95
ATOM	2241	CB	VAL	C	126	72.001	-15.676	9.441	1.00	4.00
ATOM	2242	CG1	VAL	C	126	72.289	-16.098	8.034	1.00	2.00
ATOM	2243	CG2	VAL	C	126	73.165	-14.971	10.110	1.00	4.20
ATOM	2244	N	ILE	C	127	69.574	-15.494	11.479	1.00	2.90
ATOM	2245	CA	ILE	C	127	69.040	-15.445	12.832	1.00	2.00
ATOM	2246	C	ILE	C	127	69.778	-16.195	13.887	1.00	2.00
ATOM	2247	O	ILE	C	127	70.229	-17.293	13.673	1.00	2.00
ATOM	2248	CB	ILE	C	127	67.639	-15.933	12.842	1.00	3.47
ATOM	2249	CG1	ILE	C	127	66.719	-14.903	12.183	1.00	3.92
ATOM	2250	CG2	ILE	C	127	67.218	-16.129	14.246	1.00	8.87
ATOM	2251	CD1	ILE	C	127	67.190	-14.287	10.848	1.00	5.86
ATOM	2252	N	SER	C	128	69.879	-15.595	15.058	1.00	2.00
ATOM	2253	CA	SER	C	128	70.636	-16.228	16.112	1.00	3.50
ATOM	2254	C	SER	C	128	70.097	-17.572	16.394	1.00	4.63
ATOM	2255	O	SER	C	128	68.926	-17.786	16.178	1.00	10.55
ATOM	2256	CB	SER	C	128	70.632	-15.368	17.362	1.00	2.07
ATOM	2257	OG	SER	C	128	69.508	-15.641	18.146	1.00	10.37
ATOM	2258	N	GLU	C	129	70.958	-18.497	16.819	1.00	10.30
ATOM	2259	CA	GLU	C	129	70.560	-19.882	17.142	1.00	8.25
ATOM	2260	C	GLU	C	129	71.345	-20.391	18.327	1.00	2.51
ATOM	2261	O	GLU	C	129	72.543	-20.509	18.216	1.00	2.00
ATOM	2262	CB	GLU	C	129	70.826	-20.807	15.960	1.00	6.46
ATOM	2263	CG	GLU	C	129	70.198	-22.163	16.120	1.00	17.00
ATOM	2264	CD	GLU	C	129	68.923	-22.281	15.321	1.00	24.69
ATOM	2265	OE1	GLU	C	129	68.074	-21.335	15.410	1.00	24.86
ATOM	2266	OE2	GLU	C	129	68.798	-23.316	14.613	1.00	25.19
ATOM	2267	N	ALA	C	130	70.678	-20.708	19.438	1.00	4.21
ATOM	2268	CA	ALA	C	130	71.369	-21.176	20.631	1.00	6.03
ATOM	2269	C	ALA	C	130	71.963	-22.557	20.367	1.00	10.01
ATOM	2270	O	ALA	C	130	71.543	-23.219	19.456	1.00	18.26
ATOM	2271	CB	ALA	C	130	70.442	-21.200	21.735	1.00	6.28
ATOM	2272	N	SER	C	131	72.966	-22.989	21.121	1.00	16.93
ATOM	2273	CA	SER	C	131	73.604	-24.284	20.838	1.00	25.17
ATOM	2274	C	SER	C	131	74.406	-24.856	22.020	1.00	26.98
ATOM	2275	O	SER	C	131	75.175	-24.148	22.695	1.00	21.36
ATOM	2276	CB	SER	C	131	74.502	-24.150	19.596	1.00	29.03
ATOM	2277	OG	SER	C	131	75.863	-24.414	19.893	1.00	38.47
ATOM	2278	N	SER	C	132	74.193	-26.150	22.251	1.00	29.65

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ATOM	2279	CA	SER	C	132	74.822	-26.872	23.347	1.00	35.32
ATOM	2280	C	SER	C	132	76.301	-27.048	23.161	1.00	39.67
ATOM	2281	O	SER	C	132	77.035	-27.257	24.148	1.00	37.97
ATOM	2282	CB	SER	C	132	74.185	-28.243	23.492	1.00	34.57
ATOM	2283	OG	SER	C	132	73.241	-28.426	22.461	1.00	39.55
ATOM	2284	N	LYS	C	133	76.720	-26.974	21.892	1.00	43.35
ATOM	2285	CA	LYS	C	133	78.116	-27.112	21.498	1.00	44.26
ATOM	2286	C	LYS	C	133	79.002	-26.309	22.428	1.00	46.14
ATOM	2287	O	LYS	C	133	78.521	-25.538	23.257	1.00	46.45
ATOM	2288	CB	LYS	C	133	78.314	-26.612	20.068	1.00	45.28
ATOM	2289	CG	LYS	C	133	78.496	-27.713	19.050	1.00	53.82
ATOM	2290	CD	LYS	C	133	77.688	-28.966	19.419	1.00	58.43
ATOM	2291	CE	LYS	C	133	78.521	-29.953	20.253	1.00	63.59
ATOM	2292	NZ	LYS	C	133	77.896	-30.298	21.563	1.00	61.40
ATOM	2293	N	THR	C	134	80.306	-26.465	22.294	1.00	48.26
ATOM	2294	CA	THR	C	134	81.180	-25.700	23.167	1.00	48.69
ATOM	2295	C	THR	C	134	82.085	-24.777	22.362	1.00	46.67
ATOM	2296	O	THR	C	134	83.084	-25.199	21.780	1.00	51.01
ATOM	2297	CB	THR	C	134	82.043	-26.617	24.057	1.00	49.72
ATOM	2298	OG1	THR	C	134	81.379	-27.874	24.251	1.00	55.27
ATOM	2299	CG2	THR	C	134	82.286	-25.962	25.393	1.00	47.73
ATOM	2300	N	THR	C	135	81.711	-23.515	22.298	1.00	39.82
ATOM	2301	CA	THR	C	135	82.519	-22.538	21.603	1.00	38.18
ATOM	2302	C	THR	C	135	82.096	-21.190	22.098	1.00	39.61
ATOM	2303	O	THR	C	135	81.083	-21.063	22.781	1.00	45.99
ATOM	2304	CB	THR	C	135	82.291	-22.511	20.116	1.00	33.22
ATOM	2305	OG1	THR	C	135	80.954	-22.891	19.838	1.00	27.08
ATOM	2306	CG2	THR	C	135	83.244	-23.431	19.418	1.00	39.22
ATOM	2307	N	SER	C	136	82.887	-20.182	21.781	1.00	33.04
ATOM	2308	CA	SER	C	136	82.528	-18.849	22.162	1.00	26.61
ATOM	2309	C	SER	C	136	82.069	-18.255	20.869	1.00	21.39
ATOM	2310	O	SER	C	136	81.672	-17.111	20.839	1.00	27.32
ATOM	2311	CB	SER	C	136	83.713	-18.080	22.662	1.00	28.67
ATOM	2312	OG	SER	C	136	84.688	-18.025	21.649	1.00	38.84
ATOM	2313	N	VAL	C	137	82.166	-19.028	19.793	1.00	12.94
ATOM	2314	CA	VAL	C	137	81.712	-18.576	18.481	1.00	10.86
ATOM	2315	C	VAL	C	137	80.193	-18.875	18.364	1.00	9.42
ATOM	2316	O	VAL	C	137	79.721	-20.018	18.503	1.00	9.35
ATOM	2317	CB	VAL	C	137	82.499	-19.310	17.349	1.00	7.47
ATOM	2318	CG1	VAL	C	137	82.675	-20.777	17.756	1.00	10.45
ATOM	2319	CG2	VAL	C	137	81.785	-19.218	15.998	1.00	2.00
ATOM	2320	N	LEU	C	138	79.433	-17.832	18.083	1.00	5.61
ATOM	2321	CA	LEU	C	138	78.008	-17.958	17.949	1.00	2.87
ATOM	2322	C	LEU	C	138	77.534	-18.626	16.646	1.00	6.86
ATOM	2323	O	LEU	C	138	78.063	-18.365	15.563	1.00	7.20
ATOM	2324	CB	LEU	C	138	77.363	-16.571	18.046	1.00	2.00
ATOM	2325	CG	LEU	C	138	77.718	-15.525	19.122	1.00	2.19
ATOM	2326	CD1	LEU	C	138	76.966	-14.276	18.682	1.00	2.24
ATOM	2327	CD2	LEU	C	138	77.375	-15.903	20.581	1.00	2.00
ATOM	2328	N	GLN	C	139	76.450	-19.401	16.785	1.00	10.81
ATOM	2329	CA	GLN	C	139	75.721	-20.109	15.716	1.00	7.72
ATOM	2330	C	GLN	C	139	74.675	-19.177	15.063	1.00	8.77
ATOM	2331	O	GLN	C	139	74.316	-18.113	15.593	1.00	15.48
ATOM	2332	CB	GLN	C	139	74.958	-21.262	16.308	1.00	9.33
ATOM	2333	CG	GLN	C	139	75.836	-22.273	16.950	1.00	23.42
ATOM	2334	CD	GLN	C	139	76.409	-23.238	15.933	1.00	34.50
ATOM	2335	OE1	GLN	C	139	75.680	-23.944	15.194	1.00	33.17
ATOM	2336	NE2	GLN	C	139	77.735	-23.266	15.871	1.00	40.38
ATOM	2337	N	TRP	C	140	74.170	-19.560	13.912	1.00	2.89
ATOM	2338	CA	TRP	C	140	73.189	-18.727	13.244	1.00	6.52

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ATOM	2339	C	TRP	C	140	72.392	-19.671	12.418	1.00	11.04
ATOM	2340	O	TRP	C	140	72.908	-20.699	12.015	1.00	16.83
ATOM	2341	CB	TRP	C	140	73.850	-17.696	12.312	1.00	2.72
ATOM	2342	CG	TRP	C	140	74.850	-16.869	12.995	1.00	2.00
ATOM	2343	CD1	TRP	C	140	76.149	-17.176	13.172	1.00	5.40
ATOM	2344	CD2	TRP	C	140	74.596	-15.721	13.796	1.00	2.31
ATOM	2345	NE1	TRP	C	140	76.729	-16.308	14.047	1.00	9.68
ATOM	2346	CE2	TRP	C	140	75.790	-15.405	14.452	1.00	5.37
ATOM	2347	CE3	TRP	C	140	73.462	-14.937	14.031	1.00	3.33
ATOM	2348	CZ2	TRP	C	140	75.894	-14.336	15.331	1.00	7.91
ATOM	2349	CZ3	TRP	C	140	73.554	-13.878	14.903	1.00	2.00
ATOM	2350	CH2	TRP	C	140	74.764	-13.584	15.547	1.00	7.78
ATOM	2351	N	ALA	C	141	71.128	-19.344	12.184	1.00	13.32
ATOM	2352	CA	ALA	C	141	70.260	-20.189	11.371	1.00	8.05
ATOM	2353	C	ALA	C	141	69.569	-19.378	10.294	1.00	5.19
ATOM	2354	O	ALA	C	141	69.241	-18.195	10.464	1.00	5.27
ATOM	2355	CB	ALA	C	141	69.241	-20.900	12.236	1.00	2.07
ATOM	2356	N	GLU	C	142	69.372	-20.035	9.169	1.00	2.00
ATOM	2357	CA	GLU	C	142	68.746	-19.402	8.042	1.00	2.87
ATOM	2358	C	GLU	C	142	67.235	-19.640	8.125	1.00	9.52
ATOM	2359	O	GLU	C	142	66.660	-20.281	7.235	1.00	7.73
ATOM	2360	CB	GLU	C	142	69.309	-20.047	6.809	1.00	2.00
ATOM	2361	CG	GLU	C	142	69.381	-19.190	5.577	1.00	3.82
ATOM	2362	CD	GLU	C	142	70.091	-19.957	4.472	1.00	4.40
ATOM	2363	OE1	GLU	C	142	71.217	-20.385	4.774	1.00	5.04
ATOM	2364	OE2	GLU	C	142	69.554	-20.171	3.346	1.00	2.24
ATOM	2365	N	LYS	C	143	66.608	-19.128	9.198	1.00	8.89
ATOM	2366	CA	LYS	C	143	65.176	-19.301	9.440	1.00	5.37
ATOM	2367	C	LYS	C	143	64.483	-17.962	9.694	1.00	7.37
ATOM	2368	O	LYS	C	143	65.052	-16.919	9.419	1.00	10.01
ATOM	2369	CB	LYS	C	143	65.001	-20.208	10.659	1.00	2.00
ATOM	2370	CG	LYS	C	143	65.821	-19.784	11.856	1.00	2.00
ATOM	2371	CD	LYS	C	143	65.427	-20.564	13.075	1.00	2.00
ATOM	2372	CE	LYS	C	143	66.323	-21.746	13.299	1.00	2.00
ATOM	2373	NZ	LYS	C	143	65.836	-22.780	14.256	1.00	6.23
ATOM	2374	N	GLY	C	144	63.279	-17.988	10.266	1.00	5.88
ATOM	2375	CA	GLY	C	144	62.587	-16.749	10.543	1.00	4.85
ATOM	2376	C	GLY	C	144	62.644	-15.810	9.360	1.00	9.38
ATOM	2377	O	GLY	C	144	62.830	-16.257	8.215	1.00	11.38
ATOM	2378	N	TYR	C	145	62.449	-14.514	9.623	1.00	10.24
ATOM	2379	CA	TYR	C	145	62.525	-13.492	8.565	1.00	11.20
ATOM	2380	C	TYR	C	145	64.023	-13.218	8.316	1.00	11.78
ATOM	2381	O	TYR	C	145	64.570	-12.202	8.754	1.00	12.49
ATOM	2382	CB	TYR	C	145	61.839	-12.176	8.998	1.00	11.45
ATOM	2383	CG	TYR	C	145	61.447	-11.267	7.860	1.00	9.39
ATOM	2384	CD1	TYR	C	145	60.137	-11.028	7.587	1.00	11.71
ATOM	2385	CD2	TYR	C	145	62.377	-10.790	6.972	1.00	17.93
ATOM	2386	CE1	TYR	C	145	59.737	-10.362	6.455	1.00	13.18
ATOM	2387	CE2	TYR	C	145	61.984	-10.112	5.819	1.00	22.91
ATOM	2388	CZ	TYR	C	145	60.651	-9.909	5.562	1.00	17.43
ATOM	2389	OH	TYR	C	145	60.239	-9.291	4.386	1.00	17.69
ATOM	2390	N	TYR	C	146	64.681	-14.121	7.602	1.00	7.85
ATOM	2391	CA	TYR	C	146	66.085	-13.962	7.324	1.00	4.74
ATOM	2392	C	TYR	C	146	66.355	-13.549	5.886	1.00	8.84
ATOM	2393	O	TYR	C	146	65.451	-13.354	5.081	1.00	12.20
ATOM	2394	CB	TYR	C	146	66.773	-15.263	7.562	1.00	4.89
ATOM	2395	CG	TYR	C	146	66.575	-16.218	6.414	1.00	6.28
ATOM	2396	CD1	TYR	C	146	65.589	-17.205	6.449	1.00	7.13
ATOM	2397	CD2	TYR	C	146	67.421	-16.191	5.331	1.00	3.99
ATOM	2398	CE1	TYR	C	146	65.485	-18.118	5.441	1.00	4.98

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ATOM	2399	CE2	TYR	C	146	67.313	-17.097	4.329	1.00	4.93
ATOM	2400	CZ	TYR	C	146	66.350	-18.053	4.391	1.00	4.21
ATOM	2401	OH	TYR	C	146	66.258	-18.938	3.369	1.00	13.39
ATOM	2402	N	THR	C	147	67.638	-13.446	5.564	1.00	11.29
ATOM	2403	CA	THR	C	147	68.074	-13.075	4.232	1.00	8.86
ATOM	2404	C	THR	C	147	69.294	-13.889	3.796	1.00	5.49
ATOM	2405	O	THR	C	147	70.181	-14.180	4.592	1.00	2.00
ATOM	2406	CB	THR	C	147	68.406	-11.581	4.111	1.00	7.34
ATOM	2407	OG1	THR	C	147	67.227	-10.792	4.340	1.00	13.11
ATOM	2408	CG2	THR	C	147	68.895	-11.301	2.703	1.00	2.00
ATOM	2409	N	MET	C	148	69.278	-14.269	2.523	1.00	3.64
ATOM	2410	CA	MET	C	148	70.328	-15.030	1.889	1.00	4.95
ATOM	2411	C	MET	C	148	70.019	-14.894	0.389	1.00	11.65
ATOM	2412	O	MET	C	148	69.395	-15.752	-0.230	1.00	13.70
ATOM	2413	CB	MET	C	148	70.220	-16.456	2.348	1.00	2.00
ATOM	2414	CG	MET	C	148	71.435	-17.270	2.109	1.00	2.00
ATOM	2415	SD	MET	C	148	72.857	-16.609	2.951	1.00	7.76
ATOM	2416	CE	MET	C	148	72.750	-17.170	4.666	1.00	2.27
ATOM	2417	N	SER	C	149	70.450	-13.789	-0.196	1.00	16.78
ATOM	2418	CA	SER	C	149	70.178	-13.527	-1.597	1.00	17.29
ATOM	2419	C	SER	C	149	70.617	-14.600	-2.572	1.00	17.77
ATOM	2420	O	SER	C	149	70.045	-14.706	-3.653	1.00	19.45
ATOM	2421	CB	SER	C	149	70.792	-12.192	-2.006	1.00	21.50
ATOM	2422	OG	SER	C	149	72.170	-12.131	-1.667	1.00	31.57
ATOM	2423	N	ASN	C	150	71.640	-15.378	-2.235	1.00	20.27
ATOM	2424	CA	ASN	C	150	72.088	-16.449	-3.147	1.00	26.37
ATOM	2425	C	ASN	C	150	73.341	-17.195	-2.686	1.00	25.82
ATOM	2426	O	ASN	C	150	73.877	-16.928	-1.606	1.00	26.03
ATOM	2427	CB	ASN	C	150	72.326	-15.907	-4.570	1.00	26.98
ATOM	2428	CG	ASN	C	150	73.235	-14.715	-4.581	1.00	27.55
ATOM	2429	OD1	ASN	C	150	74.285	-14.718	-3.946	1.00	24.88
ATOM	2430	ND2	ASN	C	150	72.837	-13.676	-5.304	1.00	35.98
ATOM	2431	N	ASN	C	151	73.798	-18.129	-3.522	1.00	21.47
ATOM	2432	CA	ASN	C	151	74.978	-18.911	-3.220	1.00	16.63
ATOM	2433	C	ASN	C	151	76.257	-18.082	-3.332	1.00	15.96
ATOM	2434	O	ASN	C	151	77.335	-18.564	-3.023	1.00	15.49
ATOM	2435	CB	ASN	C	151	75.053	-20.083	-4.157	1.00	19.36
ATOM	2436	CG	ASN	C	151	73.855	-20.951	-4.072	1.00	21.22
ATOM	2437	OD1	ASN	C	151	73.431	-21.542	-5.065	1.00	28.59
ATOM	2438	ND2	ASN	C	151	73.293	-21.050	-2.878	1.00	27.63
ATOM	2439	N	LEU	C	152	76.139	-16.826	-3.745	1.00	14.78
ATOM	2440	CA	LEU	C	152	77.307	-15.975	-3.845	1.00	10.04
ATOM	2441	C	LEU	C	152	77.714	-15.631	-2.427	1.00	9.53
ATOM	2442	O	LEU	C	152	78.774	-15.045	-2.231	1.00	13.72
ATOM	2443	CB	LEU	C	152	77.000	-14.701	-4.638	1.00	13.39
ATOM	2444	CG	LEU	C	152	77.014	-14.955	-6.168	1.00	13.40
ATOM	2445	CD1	LEU	C	152	77.997	-16.129	-6.503	1.00	10.51
ATOM	2446	CD2	LEU	C	152	75.617	-15.320	-6.677	1.00	10.97
ATOM	2447	N	VAL	C	153	76.820	-15.923	-1.470	1.00	9.35
ATOM	2448	CA	VAL	C	153	77.058	-15.773	-0.026	1.00	5.03
ATOM	2449	C	VAL	C	153	76.406	-16.998	0.576	1.00	4.87
ATOM	2450	O	VAL	C	153	75.327	-17.393	0.163	1.00	6.69
ATOM	2451	CB	VAL	C	153	76.455	-14.559	0.573	1.00	2.00
ATOM	2452	CG1	VAL	C	153	75.395	-14.944	1.477	1.00	2.00
ATOM	2453	CG2	VAL	C	153	77.508	-13.830	1.350	1.00	2.53
ATOM	2454	N	THR	C	154	77.092	-17.650	1.497	1.00	5.42
ATOM	2455	CA	THR	C	154	76.569	-18.877	2.041	1.00	7.68
ATOM	2456	C	THR	C	154	76.890	-19.000	3.514	1.00	13.24
ATOM	2457	O	THR	C	154	78.001	-18.647	3.943	1.00	13.27
ATOM	2458	CB	THR	C	154	77.161	-20.083	1.282	1.00	5.48

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ATOM	2459	OG1	THR	C	154	78.070	-20.788	2.140	1.00	9.39
ATOM	2460	CG2	THR	C	154	77.890	-19.627	0.037	1.00	11.10
ATOM	2461	N	LEU	C	155	75.902	-19.484	4.280	1.00	12.27
ATOM	2462	CA	LEU	C	155	76.049	-19.652	5.722	1.00	9.25
ATOM	2463	C	LEU	C	155	76.505	-21.051	5.967	1.00	8.56
ATOM	2464	O	LEU	C	155	75.718	-21.951	5.836	1.00	15.66
ATOM	2465	CB	LEU	C	155	74.702	-19.456	6.447	1.00	9.58
ATOM	2466	CG	LEU	C	155	74.650	-19.299	7.996	1.00	5.47
ATOM	2467	CD1	LEU	C	155	73.270	-19.493	8.411	1.00	10.52
ATOM	2468	CD2	LEU	C	155	75.463	-20.297	8.802	1.00	2.45
ATOM	2469	N	GLU	C	156	77.773	-21.266	6.270	1.00	8.49
ATOM	2470	CA	GLU	C	156	78.183	-22.619	6.530	1.00	5.04
ATOM	2471	C	GLU	C	156	78.528	-22.832	7.938	1.00	8.11
ATOM	2472	O	GLU	C	156	79.018	-21.924	8.612	1.00	8.96
ATOM	2473	CB	GLU	C	156	79.351	-23.036	5.668	1.00	13.43
ATOM	2474	CG	GLU	C	156	80.634	-22.243	5.814	1.00	20.00
ATOM	2475	CD	GLU	C	156	81.359	-22.198	4.492	1.00	24.87
ATOM	2476	OE1	GLU	C	156	80.670	-22.511	3.490	1.00	16.45
ATOM	2477	OE2	GLU	C	156	82.580	-21.867	4.461	1.00	28.80
ATOM	2478	N	ASN	C	157	78.250	-24.070	8.344	1.00	14.44
ATOM	2479	CA	ASN	C	157	78.432	-24.604	9.685	1.00	12.98
ATOM	2480	C	ASN	C	157	77.596	-23.904	10.737	1.00	10.69
ATOM	2481	O	ASN	C	157	77.692	-24.160	11.926	1.00	11.39
ATOM	2482	CB	ASN	C	157	79.890	-24.583	10.037	1.00	12.91
ATOM	2483	CG	ASN	C	157	80.562	-25.835	9.609	1.00	23.56
ATOM	2484	OD1	ASN	C	157	81.007	-25.942	8.466	1.00	23.53
ATOM	2485	ND2	ASN	C	157	80.620	-26.823	10.513	1.00	29.42
ATOM	2486	N	GLY	C	158	76.726	-23.022	10.297	1.00	12.28
ATOM	2487	CA	GLY	C	158	75.925	-22.318	11.262	1.00	14.39
ATOM	2488	C	GLY	C	158	76.836	-21.523	12.148	1.00	14.74
ATOM	2489	O	GLY	C	158	76.426	-21.143	13.228	1.00	17.93
ATOM	2490	N	LYS	C	159	78.068	-21.287	11.692	1.00	19.01
ATOM	2491	CA	LYS	C	159	79.048	-20.524	12.457	1.00	17.72
ATOM	2492	C	LYS	C	159	79.460	-19.260	11.719	1.00	13.40
ATOM	2493	O	LYS	C	159	79.525	-18.180	12.341	1.00	10.84
ATOM	2494	CB	LYS	C	159	80.300	-21.360	12.767	1.00	22.12
ATOM	2495	CG	LYS	C	159	80.182	-22.846	12.438	1.00	34.27
ATOM	2496	CD	LYS	C	159	79.829	-23.710	13.676	1.00	46.27
ATOM	2497	CE	LYS	C	159	79.898	-25.251	13.392	1.00	51.75
ATOM	2498	NZ	LYS	C	159	79.598	-26.138	14.577	1.00	51.72
ATOM	2499	N	GLN	C	160	79.713	-19.367	10.412	1.00	6.88
ATOM	2500	CA	GLN	C	160	80.138	-18.180	9.677	1.00	8.79
ATOM	2501	C	GLN	C	160	79.471	-17.957	8.336	1.00	8.86
ATOM	2502	O	GLN	C	160	78.771	-18.826	7.808	1.00	9.35
ATOM	2503	CB	GLN	C	160	81.622	-18.228	9.427	1.00	8.66
ATOM	2504	CG	GLN	C	160	81.915	-19.049	8.156	1.00	14.70
ATOM	2505	CD	GLN	C	160	82.705	-20.294	8.418	1.00	12.19
ATOM	2506	OE1	GLN	C	160	83.290	-20.871	7.499	1.00	12.08
ATOM	2507	NE2	GLN	C	160	82.721	-20.733	9.676	1.00	15.76
ATOM	2508	N	LEU	C	161	79.723	-16.777	7.784	1.00	4.16
ATOM	2509	CA	LEU	C	161	79.160	-16.417	6.502	1.00	4.59
ATOM	2510	C	LEU	C	161	80.370	-16.363	5.622	1.00	6.64
ATOM	2511	O	LEU	C	161	81.354	-15.748	5.992	1.00	12.59
ATOM	2512	CB	LEU	C	161	78.519	-15.040	6.576	1.00	5.27
ATOM	2513	CG	LEU	C	161	77.201	-14.919	7.311	1.00	2.00
ATOM	2514	CD1	LEU	C	161	76.971	-13.492	7.715	1.00	2.00
ATOM	2515	CD2	LEU	C	161	76.096	-15.424	6.409	1.00	6.63
ATOM	2516	N	THR	C	162	80.308	-16.996	4.464	1.00	7.81
ATOM	2517	CA	THR	C	162	81.445	-17.036	3.558	1.00	10.34
ATOM	2518	C	THR	C	162	81.098	-16.389	2.219	1.00	13.48



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ATOM	2519	O	THR	C	162	80.035	-16.643	1.656	1.00	18.89
ATOM	2520	CB	THR	C	162	81.845	-18.516	3.300	1.00	10.45
ATOM	2521	OG1	THR	C	162	82.480	-19.074	4.466	1.00	7.74
ATOM	2522	CG2	THR	C	162	82.730	-18.617	2.092	1.00	8.79
ATOM	2523	N	VAL	C	163	82.013	-15.608	1.666	1.00	14.42
ATOM	2524	CA	VAL	C	163	81.742	-14.982	0.374	1.00	13.44
ATOM	2525	C	VAL	C	163	82.612	-15.583	-0.763	1.00	13.42
ATOM	2526	O	VAL	C	163	83.785	-15.931	-0.583	1.00	12.99
ATOM	2527	CB	VAL	C	163	81.949	-13.492	0.475	1.00	10.61
ATOM	2528	CG1	VAL	C	163	80.824	-12.901	1.287	1.00	10.93
ATOM	2529	CG2	VAL	C	163	83.261	-13.218	1.164	1.00	5.95
ATOM	2530	N	LYS	C	164	82.013	-15.746	-1.929	1.00	13.04
ATOM	2531	CA	LYS	C	164	82.723	-16.300	-3.059	1.00	12.19
ATOM	2532	C	LYS	C	164	83.314	-15.201	-3.931	1.00	13.34
ATOM	2533	O	LYS	C	164	84.146	-15.493	-4.765	1.00	17.81
ATOM	2534	CB	LYS	C	164	81.777	-17.117	-3.915	1.00	8.85
ATOM	2535	CG	LYS	C	164	81.078	-18.172	-3.186	1.00	12.34
ATOM	2536	CD	LYS	C	164	80.793	-19.366	-4.107	1.00	20.57
ATOM	2537	CE	LYS	C	164	80.053	-20.484	-3.349	1.00	30.64
ATOM	2538	NZ	LYS	C	164	80.706	-20.833	-2.026	1.00	39.30
ATOM	2539	N	ARG	C	165	82.862	-13.960	-3.783	1.00	13.79
ATOM	2540	CA	ARG	C	165	83.378	-12.877	-4.620	1.00	13.55
ATOM	2541	C	ARG	C	165	84.175	-11.873	-3.846	1.00	16.19
ATOM	2542	O	ARG	C	165	83.726	-11.409	-2.816	1.00	25.80
ATOM	2543	CB	ARG	C	165	82.215	-12.158	-5.331	1.00	9.56
ATOM	2544	CG	ARG	C	165	81.882	-12.801	-6.683	1.00	11.10
ATOM	2545	CD	ARG	C	165	80.430	-13.153	-6.900	1.00	4.82
ATOM	2546	NE	ARG	C	165	79.754	-12.201	-7.778	1.00	2.00
ATOM	2547	CZ	ARG	C	165	79.253	-12.534	-8.961	1.00	3.35
ATOM	2548	NH1	ARG	C	165	79.353	-13.784	-9.406	1.00	2.00
ATOM	2549	NH2	ARG	C	165	78.657	-11.611	-9.702	1.00	4.71
ATOM	2550	N	GLN	C	166	85.363	-11.533	-4.310	1.00	18.26
ATOM	2551	CA	GLN	C	166	86.122	-10.515	-3.598	1.00	18.60
ATOM	2552	C	GLN	C	166	85.301	-9.215	-3.619	1.00	16.62
ATOM	2553	O	GLN	C	166	84.372	-9.063	-4.422	1.00	16.65
ATOM	2554	CB	GLN	C	166	87.458	-10.287	-4.283	1.00	20.80
ATOM	2555	CG	GLN	C	166	87.385	-9.525	-5.603	1.00	19.95
ATOM	2556	CD	GLN	C	166	88.542	-9.898	-6.543	1.00	25.21
ATOM	2557	OE1	GLN	C	166	89.354	-10.784	-6.238	1.00	23.10
ATOM	2558	NE2	GLN	C	166	88.621	-9.223	-7.688	1.00	27.96
ATOM	2559	N	GLY	C	167	85.625	-8.279	-2.739	1.00	10.83
ATOM	2560	CA	GLY	C	167	84.877	-7.047	-2.753	1.00	9.97
ATOM	2561	C	GLY	C	167	84.753	-6.321	-1.433	1.00	14.19
ATOM	2562	O	GLY	C	167	85.277	-6.752	-0.398	1.00	14.01
ATOM	2563	N	LEU	C	168	84.062	-5.184	-1.503	1.00	14.09
ATOM	2564	CA	LEU	C	168	83.769	-4.355	-0.347	1.00	12.51
ATOM	2565	C	LEU	C	168	82.411	-4.867	0.183	1.00	8.52
ATOM	2566	O	LEU	C	168	81.534	-5.229	-0.574	1.00	11.49
ATOM	2567	CB	LEU	C	168	83.661	-2.876	-0.784	1.00	22.27
ATOM	2568	CG	LEU	C	168	84.737	-1.855	-0.356	1.00	24.73
ATOM	2569	CD1	LEU	C	168	85.498	-2.356	0.903	1.00	30.79
ATOM	2570	CD2	LEU	C	168	85.700	-1.645	-1.487	1.00	22.33
ATOM	2571	N	TYR	C	169	82.230	-4.904	1.476	1.00	2.00
ATOM	2572	CA	TYR	C	169	80.990	-5.377	1.994	1.00	3.65
ATOM	2573	C	TYR	C	169	80.683	-4.542	3.256	1.00	10.00
ATOM	2574	O	TYR	C	169	81.594	-4.007	3.902	1.00	10.38
ATOM	2575	CB	TYR	C	169	81.151	-6.848	2.357	1.00	3.71
ATOM	2576	CG	TYR	C	169	81.225	-7.810	1.180	1.00	10.42
ATOM	2577	CD1	TYR	C	169	82.431	-8.078	0.547	1.00	15.28
ATOM	2578	CD2	TYR	C	169	80.117	-8.533	0.761	1.00	12.74

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ATOM	2579	CE1	TYR	C	169	82.535	-9.055	-0.481	1.00	9.92
ATOM	2580	CE2	TYR	C	169	80.218	-9.501	-0.258	1.00	10.17
ATOM	2581	CZ	TYR	C	169	81.419	-9.751	-0.864	1.00	4.76
ATOM	2582	OH	TYR	C	169	81.448	-10.708	-1.843	1.00	2.00
ATOM	2583	N	TYR	C	170	79.401	-4.365	3.581	1.00	10.58
ATOM	2584	CA	TYR	C	170	79.065	-3.706	4.835	1.00	9.72
ATOM	2585	C	TYR	C	170	78.725	-4.904	5.747	1.00	8.93
ATOM	2586	O	TYR	C	170	77.844	-5.690	5.429	1.00	11.47
ATOM	2587	CB	TYR	C	170	77.857	-2.810	4.709	1.00	8.23
ATOM	2588	CG	TYR	C	170	77.513	-2.233	6.056	1.00	7.25
ATOM	2589	CD1	TYR	C	170	78.356	-1.334	6.680	1.00	2.23
ATOM	2590	CD2	TYR	C	170	76.394	-2.647	6.731	1.00	10.31
ATOM	2591	CE1	TYR	C	170	78.107	-0.856	7.960	1.00	14.33
ATOM	2592	CE2	TYR	C	170	76.121	-2.182	8.023	1.00	16.20
ATOM	2593	CZ	TYR	C	170	76.993	-1.277	8.652	1.00	18.37
ATOM	2594	OH	TYR	C	170	76.794	-0.832	9.973	1.00	17.42
ATOM	2595	N	ILE	C	171	79.444	-5.083	6.843	1.00	6.00
ATOM	2596	CA	ILE	C	171	79.218	-6.245	7.705	1.00	5.29
ATOM	2597	C	ILE	C	171	78.784	-5.815	9.072	1.00	7.00
ATOM	2598	O	ILE	C	171	79.330	-4.852	9.641	1.00	5.44
ATOM	2599	CB	ILE	C	171	80.512	-7.073	7.818	1.00	13.80
ATOM	2600	CG1	ILE	C	171	80.888	-7.607	6.421	1.00	16.90
ATOM	2601	CG2	ILE	C	171	80.388	-8.154	8.921	1.00	7.30
ATOM	2602	CD1	ILE	C	171	82.300	-8.254	6.346	1.00	23.47
ATOM	2603	N	TYR	C	172	77.807	-6.558	9.594	1.00	7.90
ATOM	2604	CA	TYR	C	172	77.206	-6.251	10.883	1.00	4.87
ATOM	2605	C	TYR	C	172	76.760	-7.434	11.695	1.00	4.08
ATOM	2606	O	TYR	C	172	76.612	-8.544	11.201	1.00	8.43
ATOM	2607	CB	TYR	C	172	75.999	-5.334	10.708	1.00	6.89
ATOM	2608	CG	TYR	C	172	74.848	-5.958	9.968	1.00	2.01
ATOM	2609	CD1	TYR	C	172	74.800	-5.947	8.589	1.00	5.83
ATOM	2610	CD2	TYR	C	172	73.818	-6.589	10.656	1.00	5.48
ATOM	2611	CE1	TYR	C	172	73.752	-6.563	7.911	1.00	11.44
ATOM	2612	CE2	TYR	C	172	72.765	-7.205	9.999	1.00	4.46
ATOM	2613	CZ	TYR	C	172	72.735	-7.195	8.627	1.00	11.47
ATOM	2614	OH	TYR	C	172	71.718	-7.840	7.952	1.00	13.34
ATOM	2615	N	ALA	C	173	76.563	-7.186	12.972	1.00	4.22
ATOM	2616	CA	ALA	C	173	76.098	-8.217	13.862	1.00	6.25
ATOM	2617	C	ALA	C	173	75.455	-7.464	15.022	1.00	10.37
ATOM	2618	O	ALA	C	173	76.067	-6.557	15.635	1.00	10.52
ATOM	2619	CB	ALA	C	173	77.260	-9.111	14.341	1.00	2.00
ATOM	2620	N	GLN	C	174	74.180	-7.782	15.272	1.00	12.51
ATOM	2621	CA	GLN	C	174	73.478	-7.155	16.374	1.00	10.00
ATOM	2622	C	GLN	C	174	73.509	-8.238	17.422	1.00	3.42
ATOM	2623	O	GLN	C	174	73.243	-9.403	17.140	1.00	2.00
ATOM	2624	CB	GLN	C	174	72.030	-6.772	15.990	1.00	15.69
ATOM	2625	CG	GLN	C	174	71.561	-5.412	16.575	1.00	25.93
ATOM	2626	CD	GLN	C	174	70.626	-5.512	17.845	1.00	34.46
ATOM	2627	OE1	GLN	C	174	69.859	-4.589	18.118	1.00	37.19
ATOM	2628	NE2	GLN	C	174	70.720	-6.606	18.609	1.00	33.63
ATOM	2629	N	VAL	C	175	73.915	-7.885	18.621	1.00	2.18
ATOM	2630	CA	VAL	C	175	73.916	-8.883	19.663	1.00	6.88
ATOM	2631	C	VAL	C	175	73.493	-8.312	20.998	1.00	11.85
ATOM	2632	O	VAL	C	175	74.071	-7.361	21.522	1.00	7.35
ATOM	2633	CB	VAL	C	175	75.283	-9.557	19.338	1.00	6.24
ATOM	2634	CG1	VAL	C	175	75.399	-10.142	21.242	1.00	3.93
ATOM	2635	CG2	VAL	C	175	75.453	-10.624	18.802	1.00	2.00
ATOM	2636	N	THR	C	176	72.441	-8.907	21.533	1.00	18.26
ATOM	2637	CA	THR	C	176	71.959	-8.527	22.837	1.00	19.58
ATOM	2638	C	THR	C	176	72.179	-9.814	23.689	1.00	19.27

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ATOM	2639	O	THR	C	176	72.233	-10.951	23.178	1.00	18.40
ATOM	2640	CB	THR	C	176	70.485	-8.071	22.766	1.00	16.46
ATOM	2641	OG1	THR	C	176	69.758	-8.611	23.875	1.00	16.62
ATOM	2642	CG2	THR	C	176	69.869	-8.508	21.447	1.00	11.43
ATOM	2643	N	PHE	C	177	72.390	-9.616	24.974	1.00	15.01
ATOM	2644	CA	PHE	C	177	72.630	-10.720	25.854	1.00	13.07
ATOM	2645	C	PHE	C	177	72.013	-10.363	27.196	1.00	16.76
ATOM	2646	O	PHE	C	177	71.684	-9.196	27.469	1.00	22.42
ATOM	2647	CB	PHE	C	177	74.152	-10.979	25.967	1.00	11.21
ATOM	2648	CG	PHE	C	177	74.950	-9.815	26.551	1.00	2.79
ATOM	2649	CD1	PHE	C	177	75.138	-8.650	25.821	1.00	2.00
ATOM	2650	CD2	PHE	C	177	75.465	-9.870	27.861	1.00	2.87
ATOM	2651	CE1	PHE	C	177	75.816	-7.540	26.377	1.00	2.00
ATOM	2652	CE2	PHE	C	177	76.149	-8.750	28.425	1.00	2.00
ATOM	2653	CZ	PHE	C	177	76.319	-7.586	27.677	1.00	2.00
ATOM	2654	N	CYS	C	178	71.900	-11.355	28.059	1.00	16.24
ATOM	2655	CA	CYS	C	178	71.278	-11.155	29.357	1.00	15.81
ATOM	2656	C	CYS	C	178	72.201	-11.725	30.400	1.00	15.30
ATOM	2657	O	CYS	C	178	72.551	-12.899	30.344	1.00	15.65
ATOM	2658	CB	CYS	C	178	69.921	-11.893	29.404	1.00	16.20
ATOM	2659	SG	CYS	C	178	68.780	-11.316	30.676	1.00	11.70
ATOM	2660	N	SER	C	179	72.562	-10.938	31.389	1.00	17.85
ATOM	2661	CA	SER	C	179	73.460	-11.479	32.390	1.00	28.04
ATOM	2662	C	SER	C	179	73.283	-10.779	33.718	1.00	34.87
ATOM	2663	O	SER	C	179	72.323	-10.035	33.941	1.00	33.42
ATOM	2664	CB	SER	C	179	74.903	-11.299	31.943	1.00	28.34
ATOM	2665	OG	SER	C	179	75.157	-9.910	31.778	1.00	29.66
ATOM	2666	N	ASN	C	180	74.262	-10.985	34.588	1.00	43.85
ATOM	2667	CA	ASN	C	180	74.255	-10.384	35.920	1.00	49.07
ATOM	2668	C	ASN	C	180	75.590	-9.753	36.324	1.00	50.45
ATOM	2669	O	ASN	C	180	76.644	-10.107	35.813	1.00	51.74
ATOM	2670	CB	ASN	C	180	73.875	-11.433	36.957	1.00	47.51
ATOM	2671	CG	ASN	C	180	73.290	-10.824	38.181	1.00	48.49
ATOM	2672	OD1	ASN	C	180	73.998	-10.566	39.153	1.00	50.37
ATOM	2673	ND2	ASN	C	180	71.982	-10.565	38.147	1.00	50.42
ATOM	2674	N	ARG	C	181	75.554	-8.833	37.269	1.00	52.86
ATOM	2675	CA	ARG	C	181	76.788	-8.230	37.674	1.00	56.71
ATOM	2676	C	ARG	C	181	77.643	-9.344	38.254	1.00	60.51
ATOM	2677	O	ARG	C	181	78.503	-9.846	37.560	1.00	57.80
ATOM	2678	CB	ARG	C	181	76.549	-7.111	38.694	1.00	62.46
ATOM	2679	CG	ARG	C	181	75.993	-7.531	40.064	1.00	68.65
ATOM	2680	CD	ARG	C	181	76.575	-6.653	41.187	1.00	74.48
ATOM	2681	NE	ARG	C	181	77.027	-7.438	42.340	1.00	80.46
ATOM	2682	CZ	ARG	C	181	78.286	-7.831	42.548	1.00	81.63
ATOM	2683	NH1	ARG	C	181	79.243	-7.515	41.681	1.00	80.82
ATOM	2684	NH2	ARG	C	181	78.593	-8.539	43.633	1.00	81.55
ATOM	2685	N	GLU	C	182	77.356	-9.793	39.479	1.00	65.43
ATOM	2686	CA	GLU	C	182	78.172	-10.817	40.132	1.00	69.51
ATOM	2687	C	GLU	C	182	78.113	-12.222	39.515	1.00	71.14
ATOM	2688	O	GLU	C	182	79.129	-12.933	39.475	1.00	69.74
ATOM	2689	CB	GLU	C	182	77.833	-10.885	41.630	1.00	70.44
ATOM	2690	CG	GLU	C	182	78.721	-11.863	42.444	1.00	76.59
ATOM	2691	CD	GLU	C	182	80.204	-11.803	42.064	1.00	80.32
ATOM	2692	OE1	GLU	C	182	80.792	-12.858	41.702	1.00	79.92
ATOM	2693	OE2	GLU	C	182	80.776	-10.690	42.132	1.00	82.79
ATOM	2694	N	ALA	C	183	76.934	-12.619	39.041	1.00	74.25
ATOM	2695	CA	ALA	C	183	76.757	-13.941	38.426	1.00	76.65
ATOM	2696	C	ALA	C	183	78.062	-14.427	37.792	1.00	76.59
ATOM	2697	O	ALA	C	183	78.883	-15.090	38.432	1.00	75.87
ATOM	2698	CB	ALA	C	183	75.646	-13.884	37.369	1.00	77.36

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ATOM	2699	N	SER	C	184	78.250	-14.099	36.522	1.00	76.64
ATOM	2700	CA	SER	C	184	79.473	-14.473	35.854	1.00	77.28
ATOM	2701	C	SER	C	184	80.427	-13.360	36.263	1.00	77.05
ATOM	2702	O	SER	C	184	81.635	-13.566	36.387	1.00	76.19
ATOM	2703	CB	SER	C	184	79.264	-14.484	34.340	1.00	79.03
ATOM	2704	OG	SER	C	184	79.216	-15.816	33.842	1.00	79.71
ATOM	2705	N	SER	C	185	79.848	-12.186	36.514	1.00	76.66
ATOM	2706	CA	SER	C	185	80.597	-10.996	36.913	1.00	74.99
ATOM	2707	C	SER	C	185	81.876	-10.864	36.116	1.00	72.15
ATOM	2708	O	SER	C	185	81.904	-10.218	35.060	1.00	69.14
ATOM	2709	CB	SER	C	185	80.916	-11.033	38.421	1.00	76.41
ATOM	2710	OG	SER	C	185	80.699	-9.767	39.048	1.00	75.25
ATOM	2711	N	GLN	C	186	82.930	-11.489	36.631	1.00	69.81
ATOM	2712	CA	GLN	C	186	84.218	-11.456	35.976	1.00	68.67
ATOM	2713	C	GLN	C	186	84.434	-10.083	35.330	1.00	65.50
ATOM	2714	O	GLN	C	186	84.196	-9.029	35.946	1.00	65.05
ATOM	2715	CB	GLN	C	186	84.281	-12.566	34.906	1.00	71.86
ATOM	2716	CG	GLN	C	186	83.076	-12.601	33.926	1.00	71.01
ATOM	2717	CD	GLN	C	186	83.430	-12.198	32.493	1.00	70.25
ATOM	2718	OE1	GLN	C	186	84.558	-12.360	32.043	1.00	73.32
ATOM	2719	NE2	GLN	C	186	82.458	-11.672	31.777	1.00	66.99
ATOM	2720	N	ALA	C	187	84.870	-10.126	34.075	1.00	58.98
ATOM	2721	CA	ALA	C	187	85.149	-8.953	33.274	1.00	48.76
ATOM	2722	C	ALA	C	187	83.955	-8.720	32.376	1.00	40.78
ATOM	2723	O	ALA	C	187	82.969	-9.437	32.468	1.00	39.57
ATOM	2724	CB	ALA	C	187	86.380	-9.205	32.460	1.00	53.92
ATOM	2725	N	PRO	C	188	84.033	-7.730	31.480	1.00	31.97
ATOM	2726	CA	PRO	C	188	82.909	-7.462	30.608	1.00	27.66
ATOM	2727	C	PRO	C	188	82.530	-8.567	29.682	1.00	24.10
ATOM	2728	O	PRO	C	188	83.085	-9.651	29.749	1.00	30.59
ATOM	2729	CB	PRO	C	188	83.341	-6.213	29.861	1.00	30.67
ATOM	2730	CG	PRO	C	188	84.754	-6.237	29.874	1.00	28.85
ATOM	2731	CD	PRO	C	188	85.115	-6.782	31.207	1.00	34.32
ATOM	2732	N	PHE	C	189	81.539	-8.283	28.847	1.00	17.99
ATOM	2733	CA	PHE	C	189	81.042	-9.213	27.848	1.00	13.76
ATOM	2734	C	PHE	C	189	81.419	-8.573	26.552	1.00	15.95
ATOM	2735	O	PHE	C	189	80.770	-7.584	26.116	1.00	14.56
ATOM	2736	CB	PHE	C	189	79.518	-9.305	27.882	1.00	11.72
ATOM	2737	CG	PHE	C	189	78.927	-10.060	26.732	1.00	2.00
ATOM	2738	CD1	PHE	C	189	78.751	-9.458	25.513	1.00	2.00
ATOM	2739	CD2	PHE	C	189	78.562	-11.387	26.879	1.00	2.00
ATOM	2740	CE1	PHE	C	189	78.233	-10.163	24.474	1.00	2.00
ATOM	2741	CE2	PHE	C	189	78.044	-12.099	25.840	1.00	2.00
ATOM	2742	CZ	PHE	C	189	77.879	-11.495	24.639	1.00	2.00
ATOM	2743	N	ILE	C	190	82.485	-9.080	25.947	1.00	10.54
ATOM	2744	CA	ILE	C	190	82.847	-8.512	24.674	1.00	8.72
ATOM	2745	C	ILE	C	190	82.386	-9.443	23.534	1.00	6.62
ATOM	2746	O	ILE	C	190	82.288	-10.680	23.661	1.00	5.27
ATOM	2747	CB	ILE	C	190	84.414	-8.107	24.619	1.00	4.99
ATOM	2748	CG1	ILE	C	190	85.196	-9.035	23.710	1.00	9.86
ATOM	2749	CG2	ILE	C	190	85.034	-8.133	25.995	1.00	2.00
ATOM	2750	CD1	ILE	C	190	84.961	-8.792	22.228	1.00	15.61
ATOM	2751	N	ALA	C	191	81.997	-8.821	22.440	1.00	4.72
ATOM	2752	CA	ALA	C	191	81.590	-9.583	21.283	1.00	7.26
ATOM	2753	C	ALA	C	191	82.499	-9.094	20.166	1.00	7.71
ATOM	2754	O	ALA	C	191	82.840	-7.908	20.121	1.00	6.36
ATOM	2755	CB	ALA	C	191	80.127	-9.295	20.947	1.00	8.65
ATOM	2756	N	SER	C	192	82.841	-9.989	19.244	1.00	8.18
ATOM	2757	CA	SER	C	192	83.721	-9.643	18.146	1.00	6.91
ATOM	2758	C	SER	C	192	83.329	-10.269	16.805	1.00	7.12

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ATOM	2759	O	SER	C	192	83.032	-11.479	16.730	1.00	4.50
ATOM	2760	CB	SER	C	192	85.151	-10.073	18.497	1.00	11.70
ATOM	2761	OG	SER	C	192	85.344	-10.197	19.902	1.00	16.20
ATOM	2762	N	LEU	C	193	83.390	-9.439	15.757	1.00	4.14
ATOM	2763	CA	LEU	C	193	83.104	-9.842	14.385	1.00	2.48
ATOM	2764	C	LEU	C	193	84.471	-10.293	13.847	1.00	7.41
ATOM	2765	O	LEU	C	193	85.364	-9.462	13.645	1.00	13.99
ATOM	2766	CB	LEU	C	193	82.676	-8.627	13.589	1.00	2.00
ATOM	2767	CG	LEU	C	193	81.976	-8.925	12.274	1.00	4.52
ATOM	2768	CD1	LEU	C	193	82.307	-7.874	11.268	1.00	6.63
ATOM	2769	CD2	LEU	C	193	82.376	-10.240	11.791	1.00	4.77
ATOM	2770	N	CYS	C	194	84.654	-11.584	13.614	1.00	6.26
ATOM	2771	CA	CYS	C	194	85.929	-12.092	13.110	1.00	2.71
ATOM	2772	C	CYS	C	194	85.893	-12.496	11.662	1.00	6.97
ATOM	2773	O	CYS	C	194	84.860	-12.916	11.116	1.00	6.03
ATOM	2774	CB	CYS	C	194	86.408	-13.243	13.960	1.00	2.00
ATOM	2775	SG	CYS	C	194	86.778	-12.570	15.578	1.00	9.89
ATOM	2776	N	LEU	C	195	87.049	-12.362	11.030	1.00	11.53
ATOM	2777	CA	LEU	C	195	87.167	-12.669	9.617	1.00	8.24
ATOM	2778	C	LEU	C	195	88.239	-13.682	9.487	1.00	4.51
ATOM	2779	O	LEU	C	195	89.214	-13.652	10.219	1.00	2.00
ATOM	2780	CB	LEU	C	195	87.540	-11.421	8.848	1.00	7.77
ATOM	2781	CG	LEU	C	195	88.440	-11.639	7.670	1.00	2.00
ATOM	2782	CD1	LEU	C	195	87.605	-12.324	6.649	1.00	2.00
ATOM	2783	CD2	LEU	C	195	89.005	-10.306	7.166	1.00	2.00
ATOM	2784	N	LYS	C	196	88.010	-14.615	8.582	1.00	9.35
ATOM	2785	CA	LYS	C	196	88.944	-15.704	8.317	1.00	12.83
ATOM	2786	C	LYS	C	196	89.070	-15.827	6.810	1.00	18.63
ATOM	2787	O	LYS	C	196	88.204	-16.477	6.148	1.00	17.49
ATOM	2788	CB	LYS	C	196	88.393	-17.000	8.878	1.00	13.43
ATOM	2789	CG	LYS	C	196	89.288	-18.169	8.728	1.00	20.39
ATOM	2790	CD	LYS	C	196	90.670	-17.871	9.317	1.00	33.90
ATOM	2791	CE	LYS	C	196	91.797	-18.694	8.605	1.00	33.88
ATOM	2792	NZ	LYS	C	196	91.478	-18.962	7.141	1.00	34.15
ATOM	2793	N	SER	C	197	90.133	-15.194	6.274	1.00	20.40
ATOM	2794	CA	SER	C	197	90.385	-15.217	4.833	1.00	18.52
ATOM	2795	C	SER	C	197	91.238	-16.429	4.502	1.00	13.40
ATOM	2796	O	SER	C	197	92.035	-16.871	5.326	1.00	5.75
ATOM	2797	CB	SER	C	197	91.089	-13.961	4.337	1.00	20.21
ATOM	2798	OG	SER	C	197	91.805	-14.297	3.152	1.00	31.98
ATOM	2799	N	PRO	C	198	91.054	-16.992	3.294	1.00	13.66
ATOM	2800	CA	PRO	C	198	91.830	-18.174	2.887	1.00	15.34
ATOM	2801	C	PRO	C	198	93.339	-17.920	2.922	1.00	14.93
ATOM	2802	O	PRO	C	198	93.844	-16.878	2.475	1.00	10.25
ATOM	2803	CB	PRO	C	198	91.297	-18.498	1.492	1.00	14.84
ATOM	2804	CG	PRO	C	198	90.709	-17.144	0.992	1.00	15.55
ATOM	2805	CD	PRO	C	198	90.127	-16.541	2.235	1.00	11.70
ATOM	2806	N	GLY	C	199	94.039	-18.866	3.526	1.00	14.58
ATOM	2807	CA	GLY	C	199	95.471	-18.753	3.627	1.00	19.09
ATOM	2808	C	GLY	C	199	95.919	-17.624	4.528	1.00	21.58
ATOM	2809	O	GLY	C	199	96.990	-17.060	4.350	1.00	30.93
ATOM	2810	N	ARG	C	200	95.114	-17.263	5.502	1.00	18.82
ATOM	2811	CA	ARG	C	200	95.534	-16.223	6.408	1.00	15.19
ATOM	2812	C	ARG	C	200	95.040	-16.624	7.763	1.00	17.50
ATOM	2813	O	ARG	C	200	94.060	-17.353	7.898	1.00	14.18
ATOM	2814	CB	ARG	C	200	94.919	-14.910	6.028	1.00	15.82
ATOM	2815	CG	ARG	C	200	95.138	-14.559	4.639	1.00	17.50
ATOM	2816	CD	ARG	C	200	96.539	-14.066	4.496	1.00	25.07
ATOM	2817	NE	ARG	C	200	96.797	-13.763	3.100	1.00	36.73
ATOM	2818	CZ	ARG	C	200	97.553	-12.762	2.680	1.00	41.27

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ATOM	2819	NH1	ARG	C	200	98.136	-11.955	3.576	1.00	43.06
ATOM	2820	NH2	ARG	C	200	97.725	-12.583	1.368	1.00	42.55
ATOM	2821	N	PHE	C	201	95.718	-16.169	8.791	1.00	19.49
ATOM	2822	CA	PHE	C	201	95.249	-16.520	10.099	1.00	24.49
ATOM	2823	C	PHE	C	201	93.977	-15.707	10.325	1.00	26.89
ATOM	2824	O	PHE	C	201	93.656	-14.787	9.538	1.00	27.02
ATOM	2825	CB	PHE	C	201	96.305	-16.150	11.119	1.00	28.00
ATOM	2826	CG	PHE	C	201	97.500	-17.015	11.063	1.00	34.13
ATOM	2827	CD1	PHE	C	201	97.680	-18.030	11.998	1.00	43.30
ATOM	2828	CD2	PHE	C	201	98.434	-16.843	10.074	1.00	34.75
ATOM	2829	CE1	PHE	C	201	98.782	-18.865	11.945	1.00	44.43
ATOM	2830	CE2	PHE	C	201	99.525	-17.662	10.008	1.00	40.37
ATOM	2831	CZ	PHE	C	201	99.705	-18.681	10.948	1.00	44.40
ATOM	2832	N	GLU	C	202	93.238	-16.071	11.374	1.00	23.17
ATOM	2833	CA	GLU	C	202	92.056	-15.322	11.737	1.00	20.38
ATOM	2834	C	GLU	C	202	92.468	-13.886	11.977	1.00	20.39
ATOM	2835	O	GLU	C	202	93.607	-13.498	11.742	1.00	26.20
ATOM	2836	CB	GLU	C	202	91.442	-15.862	12.997	1.00	21.23
ATOM	2837	CG	GLU	C	202	90.926	-17.227	12.790	1.00	30.56
ATOM	2838	CD	GLU	C	202	90.449	-17.831	14.062	1.00	36.83
ATOM	2839	OE1	GLU	C	202	90.771	-17.258	15.142	1.00	36.35
ATOM	2840	OE2	GLU	C	202	89.759	-18.877	13.964	1.00	43.67
ATOM	2841	N	ARG	C	203	91.539	-13.085	12.453	1.00	18.66
ATOM	2842	CA	ARG	C	203	91.825	-11.685	12.673	1.00	13.53
ATOM	2843	C	ARG	C	203	90.502	-11.067	13.120	1.00	10.64
ATOM	2844	O	ARG	C	203	89.426	-11.329	12.751	1.00	13.38
ATOM	2845	CB	ARG	C	203	92.339	-11.079	11.352	1.00	14.07
ATOM	2846	CG	ARG	C	203	92.025	-9.609	11.084	1.00	26.44
ATOM	2847	CD	ARG	C	203	93.272	-8.791	10.620	1.00	31.40
ATOM	2848	NE	ARG	C	203	93.042	-7.346	10.762	1.00	42.21
ATOM	2849	CZ	ARG	C	203	93.202	-6.651	11.896	1.00	47.97
ATOM	2850	NH1	ARG	C	203	93.634	-7.256	13.004	1.00	48.80
ATOM	2851	NH2	ARG	C	203	92.890	-5.353	11.941	1.00	50.28
ATOM	2852	N	ILE	C	204	90.584	-10.033	13.931	1.00	4.17
ATOM	2853	CA	ILE	C	204	89.402	-9.366	14.423	1.00	2.00
ATOM	2854	C	ILE	C	204	89.110	-8.086	13.645	1.00	2.00
ATOM	2855	O	ILE	C	204	90.007	-7.303	13.378	1.00	2.78
ATOM	2856	CB	ILE	C	204	89.594	-9.010	15.870	1.00	2.00
ATOM	2857	CG1	ILE	C	204	89.568	-10.295	16.693	1.00	2.44
ATOM	2858	CG2	ILE	C	204	88.565	-8.017	16.288	1.00	2.00
ATOM	2859	CD1	ILE	C	204	89.410	-10.093	18.219	1.00	2.00
ATOM	2860	N	LEU	C	205	87.863	-7.870	13.260	1.00	3.71
ATOM	2861	CA	LEU	C	205	87.536	-6.646	12.550	1.00	4.98
ATOM	2862	C	LEU	C	205	86.912	-5.616	13.494	1.00	4.40
ATOM	2863	O	LEU	C	205	87.381	-4.482	13.550	1.00	2.00
ATOM	2864	CB	LEU	C	205	86.617	-6.928	11.359	1.00	6.75
ATOM	2865	CG	LEU	C	205	87.193	-7.847	10.266	1.00	8.61
ATOM	2866	CD1	LEU	C	205	86.257	-7.929	9.057	1.00	4.80
ATOM	2867	CD2	LEU	C	205	88.514	-7.267	9.788	1.00	8.03
ATOM	2868	N	LEU	C	206	85.861	-5.997	14.219	1.00	6.88
ATOM	2869	CA	LEU	C	206	85.215	-5.089	15.165	1.00	2.00
ATOM	2870	C	LEU	C	206	84.992	-5.780	16.484	1.00	2.00
ATOM	2871	O	LEU	C	206	85.108	-6.982	16.598	1.00	4.41
ATOM	2872	CB	LEU	C	206	83.840	-4.648	14.693	1.00	4.95
ATOM	2873	CG	LEU	C	206	83.438	-3.927	13.425	1.00	2.00
ATOM	2874	CD1	LEU	C	206	84.633	-3.595	12.605	1.00	5.05
ATOM	2875	CD2	LEU	C	206	82.457	-4.840	12.696	1.00	2.00
ATOM	2876	N	ARG	C	207	84.598	-5.019	17.476	1.00	2.00
ATOM	2877	CA	ARG	C	207	84.362	-5.583	18.784	1.00	5.97
ATOM	2878	C	ARG	C	207	83.646	-4.566	19.647	1.00	10.25

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ATOM	2879	O	ARG	C	207	84.037	-3.365	19.663	1.00	12.33
ATOM	2880	CB	ARG	C	207	85.685	-5.909	19.454	1.00	11.05
ATOM	2881	CG	ARG	C	207	86.201	-7.315	19.311	1.00	10.42
ATOM	2882	CD	ARG	C	207	87.530	-7.358	20.013	1.00	17.43
ATOM	2883	NE	ARG	C	207	87.624	-8.324	21.103	1.00	24.11
ATOM	2884	CZ	ARG	C	207	88.525	-8.238	22.080	1.00	27.43
ATOM	2885	NH1	ARG	C	207	89.372	-7.227	22.078	1.00	31.18
ATOM	2886	NH2	ARG	C	207	88.626	-9.170	23.030	1.00	31.45
ATOM	2887	N	ALA	C	208	82.641	-5.040	20.396	1.00	7.24
ATOM	2888	CA	ALA	C	208	81.881	-4.150	21.255	1.00	4.83
ATOM	2889	C	ALA	C	208	81.942	-4.783	22.569	1.00	9.19
ATOM	2890	O	ALA	C	208	82.125	-5.989	22.614	1.00	14.93
ATOM	2891	CB	ALA	C	208	80.509	-4.085	20.811	1.00	3.40
ATOM	2892	N	ALA	C	209	81.750	-4.021	23.641	1.00	13.18
ATOM	2893	CA	ALA	C	209	81.827	-4.628	24.972	1.00	22.69
ATOM	2894	C	ALA	C	209	81.148	-3.804	26.050	1.00	30.25
ATOM	2895	O	ALA	C	209	81.446	-2.601	26.179	1.00	32.42
ATOM	2896	CB	ALA	C	209	83.290	-4.887	25.384	1.00	17.10
ATOM	2897	N	ASN	C	210	80.251	-4.450	26.824	1.00	31.90
ATOM	2898	CA	ASN	C	210	79.532	-3.788	27.923	1.00	26.83
ATOM	2899	C	ASN	C	210	79.865	-4.438	29.214	1.00	24.84
ATOM	2900	O	ASN	C	210	80.511	-5.464	29.222	1.00	23.72
ATOM	2901	CB	ASN	C	210	78.041	-3.867	27.720	1.00	26.61
ATOM	2902	CG	ASN	C	210	77.586	-3.016	26.577	1.00	29.45
ATOM	2903	OD1	ASN	C	210	78.151	-3.067	25.464	1.00	28.24
ATOM	2904	ND2	ASN	C	210	76.561	-2.217	26.826	1.00	29.68
ATOM	2905	N	THR	C	211	79.400	-3.849	30.302	1.00	28.79
ATOM	2906	CA	THR	C	211	79.669	-4.375	31.627	1.00	32.56
ATOM	2907	C	THR	C	211	78.394	-4.900	32.245	1.00	35.77
ATOM	2908	O	THR	C	211	77.447	-4.142	32.486	1.00	39.30
ATOM	2909	CB	THR	C	211	80.235	-3.299	32.544	1.00	30.50
ATOM	2910	OG1	THR	C	211	80.803	-2.251	31.758	1.00	28.02
ATOM	2911	CG2	THR	C	211	81.306	-3.893	33.429	1.00	35.75
ATOM	2912	N	HIS	C	212	78.376	-6.201	32.502	1.00	37.41
ATOM	2913	CA	HIS	C	212	77.212	-6.853	33.099	1.00	41.76
ATOM	2914	C	HIS	C	212	76.371	-5.985	34.047	1.00	42.40
ATOM	2915	O	HIS	C	212	76.886	-5.326	34.954	1.00	42.38
ATOM	2916	CB	HIS	C	212	77.653	-8.139	33.806	1.00	40.90
ATOM	2917	CG	HIS	C	212	78.323	-9.119	32.894	1.00	39.18
ATOM	2918	ND1	HIS	C	212	79.473	-9.798	33.246	1.00	39.87
ATOM	2919	CD2	HIS	C	212	78.009	-9.540	31.648	1.00	36.65
ATOM	2920	CE1	HIS	C	212	79.828	-10.593	32.257	1.00	37.09
ATOM	2921	NE2	HIS	C	212	78.959	-10.456	31.273	1.00	32.47
ATOM	2922	N	SER	C	213	75.065	-5.977	33.816	1.00	43.51
ATOM	2923	CA	SER	C	213	74.168	-5.203	34.650	1.00	44.22
ATOM	2924	C	SER	C	213	73.889	-6.036	35.885	1.00	44.31
ATOM	2925	O	SER	C	213	74.356	-7.167	35.993	1.00	44.96
ATOM	2926	CB	SER	C	213	72.867	-4.927	33.905	1.00	45.96
ATOM	2927	OG	SER	C	213	71.869	-5.847	34.298	1.00	48.77
ATOM	2928	N	SER	C	214	73.120	-5.482	36.809	1.00	44.98
ATOM	2929	CA	SER	C	214	72.784	-6.187	38.041	1.00	47.55
ATOM	2930	C	SER	C	214	71.458	-6.933	37.880	1.00	44.88
ATOM	2931	O	SER	C	214	71.292	-8.048	38.373	1.00	46.00
ATOM	2932	CB	SER	C	214	72.673	-5.190	39.204	1.00	51.42
ATOM	2933	OG	SER	C	214	71.390	-4.577	39.232	1.00	56.16
ATOM	2934	N	ALA	C	215	70.522	-6.284	37.199	1.00	41.26
ATOM	2935	CA	ALA	C	215	69.193	-6.820	36.939	1.00	38.49
ATOM	2936	C	ALA	C	215	69.081	-8.303	37.098	1.00	37.76
ATOM	2937	O	ALA	C	215	69.556	-9.050	36.247	1.00	35.68
ATOM	2938	CB	ALA	C	215	68.753	-6.456	35.546	1.00	41.40

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ATOM	2939	N	LYS	C	216	68.445	-8.727	38.182	1.00	37.85
ATOM	2940	CA	LYS	C	216	68.247	-10.144	38.416	1.00	38.98
ATOM	2941	C	LYS	C	216	66.966	-10.600	37.701	1.00	37.99
ATOM	2942	O	LYS	C	216	66.037	-9.819	37.504	1.00	37.73
ATOM	2943	CB	LYS	C	216	68.153	-10.423	39.909	1.00	40.25
ATOM	2944	CG	LYS	C	216	69.483	-10.443	40.628	1.00	46.33
ATOM	2945	CD	LYS	C	216	70.216	-11.775	40.433	1.00	52.87
ATOM	2946	CE	LYS	C	216	71.411	-11.869	41.383	1.00	58.56
ATOM	2947	NZ	LYS	C	216	72.502	-12.811	40.948	1.00	62.44
ATOM	2948	N	PRO	C	217	66.940	-11.847	37.217	1.00	36.90
ATOM	2949	CA	PRO	C	217	68.012	-12.845	37.292	1.00	36.10
ATOM	2950	C	PRO	C	217	69.177	-12.338	36.428	1.00	35.84
ATOM	2951	O	PRO	C	217	70.357	-12.542	36.751	1.00	36.08
ATOM	2952	CB	PRO	C	217	67.374	-14.097	36.690	1.00	35.72
ATOM	2953	CG	PRO	C	217	66.377	-13.553	35.700	1.00	38.29
ATOM	2954	CD	PRO	C	217	65.811	-12.318	36.395	1.00	37.51
ATOM	2955	N	CYS	C	218	68.806	-11.695	35.316	1.00	30.57
ATOM	2956	CA	CYS	C	218	69.743	-11.143	34.366	1.00	23.95
ATOM	2957	C	CYS	C	218	69.123	-9.949	33.707	1.00	18.98
ATOM	2958	O	CYS	C	218	67.928	-9.888	33.574	1.00	17.50
ATOM	2959	CB	CYS	C	218	70.111	-12.192	33.311	1.00	24.34
ATOM	2960	SG	CYS	C	218	68.843	-12.752	32.130	1.00	17.79
ATOM	2961	N	GLY	C	219	69.954	-9.000	33.303	1.00	20.15
ATOM	2962	CA	GLY	C	219	69.471	-7.801	32.646	1.00	20.05
ATOM	2963	C	GLY	C	219	70.000	-7.804	31.226	1.00	19.56
ATOM	2964	O	GLY	C	219	71.185	-7.945	30.994	1.00	28.71
ATOM	2965	N	GLN	C	220	69.129	-7.659	30.254	1.00	15.11
ATOM	2966	CA	GLN	C	220	69.581	-7.687	28.896	1.00	10.95
ATOM	2967	C	GLN	C	220	70.333	-6.427	28.599	1.00	12.18
ATOM	2968	O	GLN	C	220	70.167	-5.443	29.304	1.00	15.34
ATOM	2969	CB	GLN	C	220	68.379	-7.784	27.993	1.00	10.62
ATOM	2970	CG	GLN	C	220	67.859	-9.199	27.780	1.00	8.47
ATOM	2971	CD	GLN	C	220	66.592	-9.125	26.989	1.00	20.87
ATOM	2972	OE1	GLN	C	220	65.612	-8.521	27.465	1.00	29.24
ATOM	2973	NE2	GLN	C	220	66.594	-9.671	25.756	1.00	12.29
ATOM	2974	N	GLN	C	221	71.120	-6.460	27.529	1.00	12.95
ATOM	2975	CA	GLN	C	221	71.890	-5.311	27.056	1.00	13.35
ATOM	2976	C	GLN	C	221	72.164	-5.599	25.580	1.00	15.58
ATOM	2977	O	GLN	C	221	72.417	-6.743	25.213	1.00	15.21
ATOM	2978	CB	GLN	C	221	73.197	-5.200	27.789	1.00	10.70
ATOM	2979	CG	GLN	C	221	73.124	-4.469	29.043	1.00	17.76
ATOM	2980	CD	GLN	C	221	74.478	-3.926	29.404	1.00	32.79
ATOM	2981	OE1	GLN	C	221	74.705	-2.714	29.277	1.00	44.59
ATOM	2982	NE2	GLN	C	221	75.414	-4.817	29.813	1.00	33.61
ATOM	2983	N	SER	C	222	72.095	-4.599	24.709	1.00	14.60
ATOM	2984	CA	SER	C	222	72.357	-4.902	23.310	1.00	14.76
ATOM	2985	C	SER	C	222	73.728	-4.396	22.816	1.00	16.81
ATOM	2986	O	SER	C	222	74.351	-3.531	23.433	1.00	17.77
ATOM	2987	CB	SER	C	222	71.216	-4.354	22.460	1.00	15.73
ATOM	2988	OG	SER	C	222	70.221	-5.356	22.271	1.00	20.79
ATOM	2989	N	ILE	C	223	74.173	-4.932	21.682	1.00	15.61
ATOM	2990	CA	ILE	C	223	75.460	-4.601	21.091	1.00	8.09
ATOM	2991	C	ILE	C	223	75.313	-4.555	19.574	1.00	11.68
ATOM	2992	O	ILE	C	223	74.605	-5.380	18.962	1.00	11.53
ATOM	2993	CB	ILE	C	223	76.447	-5.669	21.464	1.00	6.59
ATOM	2994	CG1	ILE	C	223	77.344	-5.158	22.577	1.00	11.15
ATOM	2995	CG2	ILE	C	223	77.179	-6.137	20.264	1.00	2.67
ATOM	2996	CD1	ILE	C	223	78.274	-6.233	23.118	1.00	18.11
ATOM	2997	N	HIS	C	224	76.007	-3.617	18.947	1.00	14.06
ATOM	2998	CA	HIS	C	224	75.893	-3.480	17.489	1.00	14.88



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ATOM	2999	C	HIS	C	224	77.182	-3.129	16.736	1.00	13.69
ATOM	3000	O	HIS	C	224	77.813	-2.098	17.005	1.00	14.51
ATOM	3001	CB	HIS	C	224	74.835	-2.406	17.167	1.00	12.41
ATOM	3002	CG	HIS	C	224	74.436	-2.345	15.721	1.00	18.23
ATOM	3003	ND1	HIS	C	224	73.257	-2.892	15.248	1.00	20.89
ATOM	3004	CD2	HIS	C	224	75.079	-1.846	14.632	1.00	17.92
ATOM	3005	CE1	HIS	C	224	73.200	-2.745	13.936	1.00	21.91
ATOM	3006	NE2	HIS	C	224	74.291	-2.116	13.539	1.00	17.17
ATOM	3007	N	LEU	C	225	77.558	-3.935	15.752	1.00	8.05
ATOM	3008	CA	LEU	C	225	78.759	-3.570	15.020	1.00	10.41
ATOM	3009	C	LEU	C	225	78.741	-3.752	13.524	1.00	7.52
ATOM	3010	O	LEU	C	225	78.472	-4.837	13.041	1.00	6.38
ATOM	3011	CB	LEU	C	225	79.970	-4.287	15.583	1.00	7.66
ATOM	3012	CG	LEU	C	225	79.661	-5.409	16.516	1.00	2.00
ATOM	3013	CD1	LEU	C	225	80.079	-6.667	15.800	1.00	3.41
ATOM	3014	CD2	LEU	C	225	80.385	-5.217	17.789	1.00	2.00
ATOM	3015	N	GLY	C	226	79.030	-2.667	12.803	1.00	9.84
ATOM	3016	CA	GLY	C	226	79.087	-2.699	11.347	1.00	11.12
ATOM	3017	C	GLY	C	226	80.487	-2.294	10.873	1.00	11.36
ATOM	3018	O	GLY	C	226	81.467	-2.545	11.557	1.00	14.38
ATOM	3019	N	GLY	C	227	80.589	-1.651	9.720	1.00	10.96
ATOM	3020	CA	GLY	C	227	81.891	-1.262	9.201	1.00	8.13
ATOM	3021	C	GLY	C	227	82.109	-1.867	7.809	1.00	9.12
ATOM	3022	O	GLY	C	227	81.813	-3.052	7.576	1.00	4.56
ATOM	3023	N	VAL	C	228	82.591	-1.054	6.868	1.00	6.14
ATOM	3024	CA	VAL	C	228	82.847	-1.544	5.525	1.00	9.49
ATOM	3025	C	VAL	C	228	84.223	-2.187	5.405	1.00	10.61
ATOM	3026	O	VAL	C	228	85.215	-1.671	5.889	1.00	14.54
ATOM	3027	CB	VAL	C	228	82.828	-0.461	4.488	1.00	9.91
ATOM	3028	CG1	VAL	C	228	83.341	-1.043	3.184	1.00	9.96
ATOM	3029	CG2	VAL	C	228	81.444	0.037	4.281	1.00	19.51
ATOM	3030	N	PHE	C	229	84.287	-3.313	4.740	1.00	8.67
ATOM	3031	CA	PHE	C	229	85.542	-3.983	4.581	1.00	8.03
ATOM	3032	C	PHE	C	229	85.677	-4.535	3.179	1.00	13.19
ATOM	3033	O	PHE	C	229	84.726	-4.607	2.401	1.00	17.14
ATOM	3034	CB	PHE	C	229	85.633	-5.124	5.565	1.00	2.00
ATOM	3035	CG	PHE	C	229	85.512	-4.700	6.971	1.00	2.04
ATOM	3036	CD1	PHE	C	229	86.617	-4.305	7.667	1.00	10.63
ATOM	3037	CD2	PHE	C	229	84.307	-4.717	7.619	1.00	10.74
ATOM	3038	CE1	PHE	C	229	86.547	-3.931	8.994	1.00	12.44
ATOM	3039	CE2	PHE	C	229	84.223	-4.336	8.968	1.00	14.55
ATOM	3040	CZ	PHE	C	229	85.366	-3.942	9.647	1.00	9.86
ATOM	3041	N	GLU	C	230	86.895	-4.893	2.837	1.00	17.56
ATOM	3042	CA	GLU	C	230	87.146	-5.484	1.541	1.00	16.60
ATOM	3043	C	GLU	C	230	87.461	-6.947	1.844	1.00	13.72
ATOM	3044	O	GLU	C	230	88.332	-7.236	2.672	1.00	3.37
ATOM	3045	CB	GLU	C	230	88.336	-4.805	0.886	1.00	18.37
ATOM	3046	CG	GLU	C	230	88.613	-5.264	-0.515	1.00	25.31
ATOM	3047	CD	GLU	C	230	88.985	-4.109	-1.406	1.00	34.09
ATOM	3048	OE1	GLU	C	230	88.779	-4.237	-2.636	1.00	36.25
ATOM	3049	OE2	GLU	C	230	89.477	-3.079	-0.870	1.00	35.41
ATOM	3050	N	LEU	C	231	86.721	-7.858	1.214	1.00	9.04
ATOM	3051	CA	LEU	C	231	86.937	-9.260	1.429	1.00	10.52
ATOM	3052	C	LEU	C	231	87.576	-9.959	0.220	1.00	13.04
ATOM	3053	O	LEU	C	231	87.236	-9.708	-0.951	1.00	12.76
ATOM	3054	CB	LEU	C	231	85.607	-9.903	1.811	1.00	9.53
ATOM	3055	CG	LEU	C	231	84.953	-9.267	3.051	1.00	13.23
ATOM	3056	CD1	LEU	C	231	83.665	-9.968	3.441	1.00	11.29
ATOM	3057	CD2	LEU	C	231	85.907	-9.362	4.213	1.00	9.66
ATOM	3058	N	GLN	C	232	88.504	-10.860	0.514	1.00	12.15

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ATOM	3059	CA	GLN	C	232	89.181	-11.576	-0.539	1.00	9.96
ATOM	3060	C	GLN	C	232	88.258	-12.675	-0.955	1.00	8.71
ATOM	3061	O	GLN	C	232	87.524	-13.204	-0.128	1.00	10.95
ATOM	3062	CB	GLN	C	232	90.466	-12.154	0.017	1.00	19.63
ATOM	3063	CG	GLN	C	232	91.641	-11.204	-0.132	1.00	29.30
ATOM	3064	CD	GLN	C	232	91.843	-10.747	-1.578	1.00	36.06
ATOM	3065	OE1	GLN	C	232	92.254	-11.541	-2.446	1.00	40.71
ATOM	3066	NE2	GLN	C	232	91.557	-9.464	-1.847	1.00	36.48
ATOM	3067	N	PRO	C	233	88.297	-13.085	-2.217	1.00	6.52
ATOM	3068	CA	PRO	C	233	87.358	-14.156	-2.528	1.00	11.05
ATOM	3069	C	PRO	C	233	87.653	-15.393	-1.684	1.00	12.77
ATOM	3070	O	PRO	C	233	88.809	-15.814	-1.574	1.00	18.70
ATOM	3071	CB	PRO	C	233	87.557	-14.373	-4.021	1.00	2.42
ATOM	3072	CG	PRO	C	233	88.869	-13.990	-4.237	1.00	9.86
ATOM	3073	CD	PRO	C	233	89.105	-12.774	-3.388	1.00	9.90
ATOM	3074	N	GLY	C	234	86.603	-15.930	-1.058	1.00	13.11
ATOM	3075	CA	GLY	C	234	86.725	-17.113	-0.236	1.00	13.57
ATOM	3076	C	GLY	C	234	86.664	-16.709	1.203	1.00	16.71
ATOM	3077	O	GLY	C	234	86.590	-17.567	2.106	1.00	18.99
ATOM	3078	N	ALA	C	235	86.679	-15.391	1.398	1.00	16.06
ATOM	3079	CA	ALA	C	235	86.626	-14.792	2.734	1.00	18.25
ATOM	3080	C	ALA	C	235	85.444	-15.312	3.540	1.00	14.98
ATOM	3081	O	ALA	C	235	84.422	-15.748	2.985	1.00	15.33
ATOM	3082	CB	ALA	C	235	86.496	-13.282	2.622	1.00	22.59
ATOM	3083	N	SER	C	236	85.569	-15.273	4.854	1.00	9.86
ATOM	3084	CA	SER	C	236	84.440	-15.710	5.666	1.00	6.97
ATOM	3085	C	SER	C	236	84.450	-15.139	7.090	1.00	6.38
ATOM	3086	O	SER	C	236	85.435	-15.247	7.834	1.00	6.86
ATOM	3087	CB	SER	C	236	84.367	-17.238	5.709	1.00	3.13
ATOM	3088	OG	SER	C	236	84.580	-17.694	7.030	1.00	3.10
ATOM	3089	N	VAL	C	237	83.313	-14.602	7.508	1.00	8.63
ATOM	3090	CA	VAL	C	237	83.240	-14.020	8.843	1.00	6.18
ATOM	3091	C	VAL	C	237	82.381	-14.768	9.891	1.00	3.01
ATOM	3092	O	VAL	C	237	81.509	-15.606	9.576	1.00	2.00
ATOM	3093	CB	VAL	C	237	82.807	-12.651	8.701	1.00	2.20
ATOM	3094	CG1	VAL	C	237	83.927	-11.903	8.058	1.00	5.00
ATOM	3095	CG2	VAL	C	237	81.559	-12.631	7.828	1.00	4.50
ATOM	3096	N	PHE	C	238	82.718	-14.517	11.148	1.00	2.00
ATOM	3097	CA	PHE	C	238	82.030	-15.142	12.255	1.00	4.76
ATOM	3098	C	PHE	C	238	81.986	-14.315	13.545	1.00	5.67
ATOM	3099	O	PHE	C	238	82.955	-13.678	13.920	1.00	4.19
ATOM	3100	CB	PHE	C	238	82.668	-16.493	12.520	1.00	5.59
ATOM	3101	CG	PHE	C	238	84.087	-16.408	12.989	1.00	11.11
ATOM	3102	CD1	PHE	C	238	85.108	-16.233	12.075	1.00	14.33
ATOM	3103	CD2	PHE	C	238	84.412	-16.518	14.344	1.00	11.40
ATOM	3104	CE1	PHE	C	238	86.440	-16.171	12.506	1.00	13.82
ATOM	3105	CE2	PHE	C	238	85.745	-16.457	14.787	1.00	8.97
ATOM	3106	CZ	PHE	C	238	86.756	-16.284	13.871	1.00	10.13
ATOM	3107	N	VAL	C	239	80.843	-14.314	14.227	1.00	11.22
ATOM	3108	CA	VAL	C	239	80.717	-13.522	15.459	1.00	10.74
ATOM	3109	C	VAL	C	239	81.129	-14.364	16.609	1.00	10.33
ATOM	3110	O	VAL	C	239	80.784	-15.524	16.684	1.00	15.63
ATOM	3111	CB	VAL	C	239	79.308	-13.042	15.757	1.00	3.82
ATOM	3112	CG1	VAL	C	239	79.388	-12.166	16.942	1.00	2.00
ATOM	3113	CG2	VAL	C	239	78.712	-12.301	14.561	1.00	2.00
ATOM	3114	N	ASN	C	240	81.866	-13.787	17.521	1.00	8.89
ATOM	3115	CA	ASN	C	240	82.355	-14.592	18.604	1.00	9.13
ATOM	3116	C	ASN	C	240	82.166	-13.786	19.843	1.00	8.31
ATOM	3117	O	ASN	C	240	82.380	-12.583	19.817	1.00	12.01
ATOM	3118	CB	ASN	C	240	83.832	-14.854	18.354	1.00	18.58

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ATOM	3119	CG	ASN	C	240	84.471	-15.659	19.445	1.00	25.23
ATOM	3120	OD1	ASN	C	240	83.776	-16.312	20.214	1.00	30.74
ATOM	3121	ND2	ASN	C	240	85.807	-15.619	19.530	1.00	29.88
ATOM	3122	N	VAL	C	241	81.728	-14.411	20.925	1.00	6.24
ATOM	3123	CA	VAL	C	241	81.541	-13.659	22.150	1.00	5.59
ATOM	3124	C	VAL	C	241	82.151	-14.414	23.312	1.00	6.01
ATOM	3125	O	VAL	C	241	82.483	-15.625	23.212	1.00	2.00
ATOM	3126	CB	VAL	C	241	80.035	-13.383	22.471	1.00	4.25
ATOM	3127	CG1	VAL	C	241	79.220	-13.108	21.200	1.00	2.98
ATOM	3128	CG2	VAL	C	241	79.452	-14.577	23.166	1.00	10.34
ATOM	3129	N	THR	C	242	82.221	-13.679	24.424	1.00	2.00
ATOM	3130	CA	THR	C	242	82.827	-14.184	25.608	1.00	3.55
ATOM	3131	C	THR	C	242	82.033	-15.288	26.280	1.00	7.90
ATOM	3132	O	THR	C	242	82.636	-16.265	26.715	1.00	14.28
ATOM	3133	CB	THR	C	242	83.107	-13.092	26.555	1.00	2.71
ATOM	3134	OG1	THR	C	242	82.404	-13.372	27.761	1.00	15.77
ATOM	3135	CG2	THR	C	242	82.707	-11.758	25.961	1.00	2.00
ATOM	3136	N	ASP	C	243	80.704	-15.184	26.339	1.00	9.09
ATOM	3137	CA	ASP	C	243	79.914	-16.261	26.930	1.00	8.83
ATOM	3138	C	ASP	C	243	78.618	-16.448	26.175	1.00	7.16
ATOM	3139	O	ASP	C	243	77.628	-15.874	26.515	1.00	14.70
ATOM	3140	CB	ASP	C	243	79.579	-15.975	28.402	1.00	14.07
ATOM	3141	CG	ASP	C	243	78.732	-17.083	29.028	1.00	19.81
ATOM	3142	OD1	ASP	C	243	78.434	-16.961	30.239	1.00	23.23
ATOM	3143	OD2	ASP	C	243	78.376	-18.061	28.311	1.00	20.85
ATOM	3144	N	PRO	C	244	78.593	-17.284	25.160	1.00	7.03
ATOM	3145	CA	PRO	C	244	77.336	-17.464	24.421	1.00	9.00
ATOM	3146	C	PRO	C	244	76.200	-17.998	25.318	1.00	8.25
ATOM	3147	O	PRO	C	244	75.029	-17.740	25.071	1.00	9.20
ATOM	3148	CB	PRO	C	244	77.717	-18.424	23.291	1.00	4.20
ATOM	3149	CG	PRO	C	244	78.898	-19.133	23.771	1.00	4.36
ATOM	3150	CD	PRO	C	244	79.661	-18.141	24.657	1.00	9.06
ATOM	3151	N	SER	C	245	76.554	-18.707	26.382	1.00	9.06
ATOM	3152	CA	SER	C	245	75.558	-19.252	27.292	1.00	9.55
ATOM	3153	C	SER	C	245	74.657	-18.124	27.742	1.00	8.70
ATOM	3154	O	SER	C	245	73.808	-18.317	28.602	1.00	12.69
ATOM	3155	CB	SER	C	245	76.217	-19.831	28.536	1.00	16.07
ATOM	3156	OG	SER	C	245	76.291	-18.817	29.535	1.00	26.26
ATOM	3157	N	GLN	C	246	74.862	-16.916	27.243	1.00	7.28
ATOM	3158	CA	GLN	C	246	73.965	-15.868	27.668	1.00	7.62
ATOM	3159	C	GLN	C	246	73.643	-14.771	26.682	1.00	2.00
ATOM	3160	O	GLN	C	246	73.325	-13.654	27.043	1.00	2.00
ATOM	3161	CB	GLN	C	246	74.450	-15.293	28.982	1.00	8.40
ATOM	3162	CG	GLN	C	246	75.668	-14.539	28.899	1.00	11.22
ATOM	3163	CD	GLN	C	246	76.357	-14.571	30.217	1.00	21.64
ATOM	3164	OE1	GLN	C	246	77.281	-13.793	30.461	1.00	26.75
ATOM	3165	NE2	GLN	C	246	75.918	-15.480	31.099	1.00	25.30
ATOM	3166	N	VAL	C	247	73.785	-15.064	25.415	1.00	4.05
ATOM	3167	CA	VAL	C	247	73.377	-14.059	24.470	1.00	8.39
ATOM	3168	C	VAL	C	247	71.889	-14.349	24.469	1.00	9.19
ATOM	3169	O	VAL	C	247	71.503	-15.463	24.810	1.00	5.28
ATOM	3170	CB	VAL	C	247	74.027	-14.304	23.059	1.00	11.66
ATOM	3171	CG1	VAL	C	247	75.029	-15.476	23.149	1.00	5.43
ATOM	3172	CG2	VAL	C	247	72.962	-14.626	21.974	1.00	8.26
ATOM	3173	N	SER	C	248	71.080	-13.361	24.085	1.00	11.94
ATOM	3174	CA	SER	C	248	69.627	-13.508	24.030	1.00	10.16
ATOM	3175	C	SER	C	248	69.195	-13.934	22.651	1.00	11.54
ATOM	3176	O	SER	C	248	69.648	-13.349	21.686	1.00	19.01
ATOM	3177	CB	SER	C	248	68.920	-12.184	24.322	1.00	10.35
ATOM	3178	OG	SER	C	248	68.768	-11.964	25.720	1.00	19.18

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ATOM	3179	N	HIS	C	249	68.257	-14.879	22.563	1.00	13.24
ATOM	3180	CA	HIS	C	249	67.746	-15.377	21.272	1.00	8.77
ATOM	3181	C	HIS	C	249	66.255	-15.076	20.992	1.00	8.44
ATOM	3182	O	HIS	C	249	65.658	-15.639	20.073	1.00	8.96
ATOM	3183	CB	HIS	C	249	67.904	-16.874	21.181	1.00	10.66
ATOM	3184	CG	HIS	C	249	69.313	-17.334	21.107	1.00	10.87
ATOM	3185	ND1	HIS	C	249	70.018	-17.385	19.927	1.00	9.01
ATOM	3186	CD2	HIS	C	249	70.121	-17.863	22.054	1.00	10.81
ATOM	3187	CE1	HIS	C	249	71.195	-17.935	20.142	1.00	11.16
ATOM	3188	NE2	HIS	C	249	71.285	-18.225	21.428	1.00	12.78
ATOM	3189	N	GLY	C	250	65.616	-14.299	21.854	1.00	5.82
ATOM	3190	CA	GLY	C	250	64.242	-13.932	21.586	1.00	8.15
ATOM	3191	C	GLY	C	250	64.142	-13.350	20.203	1.00	4.67
ATOM	3192	O	GLY	C	250	65.059	-12.671	19.774	1.00	5.79
ATOM	3193	N	THR	C	251	63.025	-13.566	19.526	1.00	4.32
ATOM	3194	CA	THR	C	251	62.906	-13.068	18.179	1.00	4.76
ATOM	3195	C	THR	C	251	63.366	-11.631	18.075	1.00	2.00
ATOM	3196	O	THR	C	251	63.095	-10.844	18.947	1.00	2.00
ATOM	3197	CB	THR	C	251	61.439	-13.224	17.590	1.00	5.23
ATOM	3198	OG1	THR	C	251	60.970	-11.970	17.062	1.00	3.38
ATOM	3199	CG2	THR	C	251	60.494	-13.740	18.600	1.00	9.24
ATOM	3200	N	GLY	C	252	64.122	-11.352	17.017	1.00	2.00
ATOM	3201	CA	GLY	C	252	64.615	-10.020	16.729	1.00	8.33
ATOM	3202	C	GLY	C	252	65.802	-9.491	17.516	1.00	14.46
ATOM	3203	O	GLY	C	252	66.280	-8.377	17.242	1.00	13.51
ATOM	3204	N	PHE	C	253	66.265	-10.255	18.504	1.00	14.94
ATOM	3205	CA	PHE	C	253	67.370	-9.810	19.332	1.00	14.58
ATOM	3206	C	PHE	C	253	68.791	-9.896	18.728	1.00	16.62
ATOM	3207	O	PHE	C	253	69.453	-8.872	18.535	1.00	19.48
ATOM	3208	CB	PHE	C	253	67.310	-10.547	20.678	1.00	14.77
ATOM	3209	CG	PHE	C	253	66.401	-9.896	21.694	1.00	16.09
ATOM	3210	CD1	PHE	C	253	66.566	-8.562	22.072	1.00	20.98
ATOM	3211	CD2	PHE	C	253	65.397	-10.615	22.297	1.00	15.84
ATOM	3212	CE1	PHE	C	253	65.741	-7.964	23.045	1.00	18.03
ATOM	3213	CE2	PHE	C	253	64.587	-10.020	23.254	1.00	15.86
ATOM	3214	CZ	PHE	C	253	64.769	-8.692	23.623	1.00	14.46
ATOM	3215	N	THR	C	254	69.256	-11.108	18.449	1.00	12.35
ATOM	3216	CA	THR	C	254	70.586	-11.310	17.919	1.00	5.69
ATOM	3217	C	THR	C	254	70.591	-11.744	16.456	1.00	9.55
ATOM	3218	O	THR	C	254	70.073	-12.804	16.101	1.00	11.08
ATOM	3219	CB	THR	C	254	71.304	-12.361	18.765	1.00	3.00
ATOM	3220	OG1	THR	C	254	71.503	-11.859	20.093	1.00	4.27
ATOM	3221	CG2	THR	C	254	72.637	-12.691	18.185	1.00	9.80
ATOM	3222	N	SER	C	255	71.213	-10.929	15.607	1.00	10.65
ATOM	3223	CA	SER	C	255	71.299	-11.229	14.182	1.00	9.64
ATOM	3224	C	SER	C	255	72.725	-10.967	13.757	1.00	11.78
ATOM	3225	O	SER	C	255	73.500	-10.390	14.532	1.00	12.31
ATOM	3226	CB	SER	C	255	70.384	-10.319	13.370	1.00	9.31
ATOM	3227	OG	SER	C	255	70.031	-9.174	14.120	1.00	18.79
ATOM	3228	N	PHE	C	256	73.022	-11.316	12.496	1.00	14.81
ATOM	3229	CA	PHE	C	256	74.359	-11.204	11.874	1.00	8.74
ATOM	3230	C	PHE	C	256	74.141	-11.198	10.362	1.00	8.72
ATOM	3231	O	PHE	C	256	73.321	-11.960	9.849	1.00	7.27
ATOM	3232	CB	PHE	C	256	75.136	-12.440	12.327	1.00	10.88
ATOM	3233	CG	PHE	C	256	76.417	-12.688	11.634	1.00	8.30
ATOM	3234	CD1	PHE	C	256	77.294	-11.655	11.334	1.00	11.32
ATOM	3235	CD2	PHE	C	256	76.793	-14.006	11.382	1.00	2.48
ATOM	3236	CE1	PHE	C	256	78.527	-11.945	10.800	1.00	8.41
ATOM	3237	CE2	PHE	C	256	77.995	-14.289	10.858	1.00	2.00
ATOM	3238	CZ	PHE	C	256	78.874	-13.263	10.566	1.00	6.50

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ATOM	3239	N	GLY	C	257	74.901	-10.374	9.647	1.00	14.08
ATOM	3240	CA	GLY	C	257	74.734	-10.278	8.198	1.00	9.92
ATOM	3241	C	GLY	C	257	75.646	-9.306	7.452	1.00	3.47
ATOM	3242	O	GLY	C	257	76.349	-8.475	8.053	1.00	2.00
ATOM	3243	N	LEU	C	258	75.612	-9.414	6.130	1.00	2.00
ATOM	3244	CA	LEU	C	258	76.449	-8.606	5.258	1.00	2.37
ATOM	3245	C	LEU	C	258	75.870	-8.352	3.908	1.00	3.92
ATOM	3246	O	LEU	C	258	75.226	-9.201	3.279	1.00	8.01
ATOM	3247	CB	LEU	C	258	77.792	-9.288	5.013	1.00	2.00
ATOM	3248	CG	LEU	C	258	77.697	-10.722	4.491	1.00	2.00
ATOM	3249	CD1	LEU	C	258	77.636	-10.753	3.036	1.00	2.10
ATOM	3250	CD2	LEU	C	258	78.862	-11.489	4.948	1.00	2.00
ATOM	3251	N	LEU	C	259	76.183	-7.189	3.400	1.00	3.90
ATOM	3252	CA	LEU	C	259	75.692	-6.872	2.093	1.00	9.13
ATOM	3253	C	LEU	C	259	76.880	-6.305	1.267	1.00	10.00
ATOM	3254	O	LEU	C	259	77.744	-5.569	1.758	1.00	12.61
ATOM	3255	CB	LEU	C	259	74.509	-5.888	2.217	1.00	2.68
ATOM	3256	CG	LEU	C	259	75.112	-4.645	2.815	1.00	5.17
ATOM	3257	CD1	LEU	C	259	75.237	-3.662	1.651	1.00	14.17
ATOM	3258	CD2	LEU	C	259	74.331	-4.099	3.966	1.00	2.00
ATOM	3259	N	LYS	C	260	76.929	-6.662	0.003	1.00	6.34
ATOM	3260	CA	LYS	C	260	77.995	-6.190	-0.852	1.00	7.55
ATOM	3261	C	LYS	C	260	77.576	-4.934	-1.635	1.00	5.22
ATOM	3262	O	LYS	C	260	76.474	-4.871	-2.133	1.00	7.20
ATOM	3263	CB	LYS	C	260	78.355	-7.343	-1.797	1.00	10.78
ATOM	3264	CG	LYS	C	260	79.301	-7.048	-2.915	1.00	7.74
ATOM	3265	CD	LYS	C	260	79.855	-8.336	-3.440	1.00	10.64
ATOM	3266	CE	LYS	C	260	80.871	-7.993	-4.487	1.00	20.59
ATOM	3267	NZ	LYS	C	260	80.259	-7.124	-5.523	1.00	22.32
ATOM	3268	N	LEU	C	261	78.468	-3.956	-1.775	1.00	4.79
ATOM	3269	CA	LEU	C	261	78.191	-2.723	-2.526	1.00	5.93
ATOM	3270	C	LEU	C	261	78.457	-2.868	-4.032	1.00	14.20
ATOM	3271	O	LEU	C	261	79.441	-3.592	-4.397	1.00	18.47
ATOM	3272	CB	LEU	C	261	79.074	-1.619	-2.021	1.00	3.86
ATOM	3273	CG	LEU	C	261	79.605	-1.941	-0.638	1.00	14.16
ATOM	3274	CD1	LEU	C	261	80.273	-0.667	-0.022	1.00	15.90
ATOM	3275	CD2	LEU	C	261	78.419	-2.440	0.239	1.00	24.94
ATOM	3276	OT	LEU	C	261	77.692	-2.251	-4.836	1.00	16.25
ATOM	3277	N	GLN	H	1	40.685	24.169	32.403	1.00	50.34
ATOM	3278	CA	GLN	H	1	41.540	25.137	31.652	1.00	49.37
ATOM	3279	C	GLN	H	1	42.999	24.730	31.816	1.00	44.44
ATOM	3280	O	GLN	H	1	43.433	24.457	32.934	1.00	49.26
ATOM	3281	CB	GLN	H	1	41.338	26.566	32.200	1.00	55.18
ATOM	3282	CG	GLN	H	1	40.043	26.789	33.021	1.00	65.37
ATOM	3283	CD	GLN	H	1	39.261	28.074	32.631	1.00	70.84
ATOM	3284	OE1	GLN	H	1	38.778	28.820	33.500	1.00	74.05
ATOM	3285	NE2	GLN	H	1	39.129	28.322	31.327	1.00	71.79
ATOM	3286	N	VAL	H	2	43.754	24.671	30.724	1.00	34.32
ATOM	3287	CA	VAL	H	2	45.176	24.313	30.817	1.00	25.29
ATOM	3288	C	VAL	H	2	45.986	25.552	31.176	1.00	19.80
ATOM	3289	O	VAL	H	2	46.068	26.465	30.376	1.00	19.78
ATOM	3290	CB	VAL	H	2	45.706	23.773	29.468	1.00	25.06
ATOM	3291	CG1	VAL	H	2	45.099	24.570	28.309	1.00	26.68
ATOM	3292	CG2	VAL	H	2	47.208	23.841	29.425	1.00	14.66
ATOM	3293	N	GLN	H	3	46.573	25.615	32.363	1.00	14.41
ATOM	3294	CA	GLN	H	3	47.344	26.805	32.696	1.00	14.34
ATOM	3295	C	GLN	H	3	48.700	26.566	33.376	1.00	15.23
ATOM	3296	O	GLN	H	3	48.947	25.515	33.994	1.00	15.06
ATOM	3297	CB	GLN	H	3	46.491	27.782	33.516	1.00	16.82
ATOM	3298	CG	GLN	H	3	46.105	27.307	34.914	1.00	32.57

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ATOM	3299	CD	GLN	H	3	45.545	28.422	35.814	1.00	38.63
ATOM	3300	OE1	GLN	H	3	45.421	29.580	35.386	1.00	37.74
ATOM	3301	NE2	GLN	H	3	45.211	28.067	37.075	1.00	42.38
ATOM	3302	N	LEU	H	4	49.588	27.550	33.189	1.00	13.45
ATOM	3303	CA	LEU	H	4	50.955	27.545	33.720	1.00	11.00
ATOM	3304	C	LEU	H	4	51.172	28.794	34.561	1.00	14.31
ATOM	3305	O	LEU	H	4	51.158	29.927	34.047	1.00	13.85
ATOM	3306	CB	LEU	H	4	51.988	27.584	32.587	1.00	11.34
ATOM	3307	CG	LEU	H	4	52.130	26.499	31.519	1.00	8.91
ATOM	3308	CD1	LEU	H	4	53.424	26.704	30.872	1.00	4.04
ATOM	3309	CD2	LEU	H	4	52.042	25.105	32.080	1.00	5.97
ATOM	3310	N	VAL	H	5	51.405	28.606	35.848	1.00	13.53
ATOM	3311	CA	VAL	H	5	51.586	29.774	36.684	1.00	13.98
ATOM	3312	C	VAL	H	5	52.997	29.998	37.184	1.00	15.39
ATOM	3313	O	VAL	H	5	53.472	29.309	38.077	1.00	20.90
ATOM	3314	CB	VAL	H	5	50.646	29.709	37.887	1.00	14.57
ATOM	3315	CG1	VAL	H	5	50.681	31.036	38.632	1.00	2.00
ATOM	3316	CG2	VAL	H	5	49.225	29.254	37.436	1.00	14.90
ATOM	3317	N	GLN	H	6	53.676	30.942	36.556	1.00	15.29
ATOM	3318	CA	GLN	H	6	55.037	31.299	36.925	1.00	14.28
ATOM	3319	C	GLN	H	6	55.069	31.970	38.245	1.00	12.20
ATOM	3320	O	GLN	H	6	54.046	32.435	38.725	1.00	14.04
ATOM	3321	CB	GLN	H	6	55.661	32.265	35.919	1.00	20.68
ATOM	3322	CG	GLN	H	6	56.948	31.757	35.256	1.00	27.42
ATOM	3323	CD	GLN	H	6	56.957	31.906	33.727	1.00	28.43
ATOM	3324	OE1	GLN	H	6	55.919	31.934	33.055	1.00	26.30
ATOM	3325	NE2	GLN	H	6	58.149	31.993	33.177	1.00	31.79
ATOM	3326	N	SER	H	7	56.287	32.057	38.779	1.00	12.79
ATOM	3327	CA	SER	H	7	56.607	32.645	40.074	1.00	11.58
ATOM	3328	C	SER	H	7	56.742	34.130	40.117	1.00	8.88
ATOM	3329	O	SER	H	7	56.735	34.819	39.096	1.00	6.23
ATOM	3330	CB	SER	H	7	57.913	32.067	40.612	1.00	15.74
ATOM	3331	OG	SER	H	7	58.985	32.957	40.319	1.00	22.92
ATOM	3332	N	GLY	H	8	56.884	34.623	41.338	1.00	9.73
ATOM	3333	CA	GLY	H	8	57.000	36.057	41.519	1.00	14.46
ATOM	3334	C	GLY	H	8	58.215	36.700	40.928	1.00	10.63
ATOM	3335	O	GLY	H	8	59.205	36.009	40.778	1.00	13.22
ATOM	3336	N	ALA	H	9	58.142	38.001	40.626	1.00	12.64
ATOM	3337	CA	ALA	H	9	59.274	38.760	40.063	1.00	17.88
ATOM	3338	C	ALA	H	9	60.436	38.704	41.037	1.00	19.00
ATOM	3339	O	ALA	H	9	60.209	38.531	42.235	1.00	19.47
ATOM	3340	CB	ALA	H	9	58.886	40.190	39.821	1.00	18.30
ATOM	3341	N	GLU	H	10	61.662	38.828	40.523	1.00	22.22
ATOM	3342	CA	GLU	H	10	62.861	38.741	41.357	1.00	31.14
ATOM	3343	C	GLU	H	10	63.838	39.863	41.036	1.00	32.14
ATOM	3344	O	GLU	H	10	64.053	40.179	39.867	1.00	31.74
ATOM	3345	CB	GLU	H	10	63.564	37.368	41.168	1.00	31.39
ATOM	3346	CG	GLU	H	10	63.512	36.421	42.381	1.00	38.69
ATOM	3347	CD	GLU	H	10	62.394	35.383	42.261	1.00	50.33
ATOM	3348	OE1	GLU	H	10	62.052	35.012	41.116	1.00	50.53
ATOM	3349	OE2	GLU	H	10	61.842	34.936	43.303	1.00	59.01
ATOM	3350	N	VAL	H	11	64.372	40.496	42.081	1.00	34.74
ATOM	3351	CA	VAL	H	11	65.374	41.556	41.919	1.00	33.27
ATOM	3352	C	VAL	H	11	66.598	40.989	42.616	1.00	36.28
ATOM	3353	O	VAL	H	11	66.549	40.634	43.802	1.00	39.78
ATOM	3354	CB	VAL	H	11	64.995	42.875	42.625	1.00	29.06
ATOM	3355	CG1	VAL	H	11	65.507	44.039	41.828	1.00	23.63
ATOM	3356	CG2	VAL	H	11	63.480	42.978	42.814	1.00	31.92
ATOM	3357	N	VAL	H	12	67.688	40.882	41.870	1.00	37.01
ATOM	3358	CA	VAL	H	12	68.918	40.325	42.407	1.00	36.90

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ATOM	3359	C	VAL	H	12	70.201	41.015	41.941	1.00	37.50
ATOM	3360	O	VAL	H	12	70.321	41.478	40.794	1.00	35.94
ATOM	3361	CB	VAL	H	12	69.048	38.837	42.058	1.00	37.56
ATOM	3362	CG1	VAL	H	12	69.192	38.659	40.533	1.00	33.06
ATOM	3363	CG2	VAL	H	12	70.242	38.256	42.783	1.00	38.73
ATOM	3364	N	LYS	H	13	71.166	41.052	42.852	1.00	35.07
ATOM	3365	CA	LYS	H	13	72.459	41.669	42.591	1.00	33.56
ATOM	3366	C	LYS	H	13	73.214	40.762	41.670	1.00	31.74
ATOM	3367	O	LYS	H	13	73.065	39.535	41.741	1.00	31.73
ATOM	3368	CB	LYS	H	13	73.265	41.837	43.872	1.00	37.13
ATOM	3369	CG	LYS	H	13	72.571	41.303	45.118	1.00	46.91
ATOM	3370	CD	LYS	H	13	72.346	39.792	45.022	1.00	54.48
ATOM	3371	CE	LYS	H	13	71.075	39.368	45.761	1.00	58.50
ATOM	3372	NZ	LYS	H	13	69.960	40.372	45.653	1.00	59.84
ATOM	3373	N	PRO	H	14	74.057	41.351	40.807	1.00	29.84
ATOM	3374	CA	PRO	H	14	74.853	40.591	39.841	1.00	27.93
ATOM	3375	C	PRO	H	14	75.561	39.436	40.499	1.00	28.28
ATOM	3376	O	PRO	H	14	75.700	39.397	41.708	1.00	30.95
ATOM	3377	CB	PRO	H	14	75.821	41.625	39.271	1.00	24.27
ATOM	3378	CG	PRO	H	14	75.089	42.944	39.436	1.00	24.52
ATOM	3379	CD	PRO	H	14	74.298	42.804	40.708	1.00	26.06
ATOM	3380	N	GLY	H	15	75.983	38.476	39.700	1.00	29.98
ATOM	3381	CA	GLY	H	15	76.697	37.354	40.255	1.00	31.59
ATOM	3382	C	GLY	H	15	75.819	36.380	41.007	1.00	30.97
ATOM	3383	O	GLY	H	15	76.128	35.175	41.080	1.00	33.44
ATOM	3384	N	ALA	H	16	74.724	36.872	41.563	1.00	29.24
ATOM	3385	CA	ALA	H	16	73.856	35.977	42.316	1.00	34.90
ATOM	3386	C	ALA	H	16	73.226	34.914	41.403	1.00	36.74
ATOM	3387	O	ALA	H	16	73.622	34.757	40.224	1.00	38.49
ATOM	3388	CB	ALA	H	16	72.764	36.778	43.062	1.00	29.80
ATOM	3389	N	SER	H	17	72.266	34.175	41.953	1.00	34.58
ATOM	3390	CA	SER	H	17	71.571	33.164	41.178	1.00	38.37
ATOM	3391	C	SER	H	17	70.118	33.125	41.637	1.00	37.92
ATOM	3392	O	SER	H	17	69.816	33.357	42.814	1.00	42.42
ATOM	3393	CB	SER	H	17	72.244	31.805	41.343	1.00	41.01
ATOM	3394	OG	SER	H	17	73.486	31.798	40.654	1.00	51.88
ATOM	3395	N	VAL	H	18	69.212	32.850	40.709	1.00	31.77
ATOM	3396	CA	VAL	H	18	67.813	32.818	41.051	1.00	27.16
ATOM	3397	C	VAL	H	18	67.176	31.541	40.523	1.00	27.18
ATOM	3398	O	VAL	H	18	67.645	30.981	39.516	1.00	31.10
ATOM	3399	CB	VAL	H	18	67.130	34.025	40.472	1.00	26.45
ATOM	3400	CG1	VAL	H	18	67.411	34.115	38.970	1.00	21.23
ATOM	3401	CG2	VAL	H	18	65.658	33.956	40.808	1.00	29.31
ATOM	3402	N	LYS	H	19	66.141	31.049	41.203	1.00	18.83
ATOM	3403	CA	LYS	H	19	65.511	29.818	40.750	1.00	15.64
ATOM	3404	C	LYS	H	19	64.044	29.960	40.405	1.00	13.01
ATOM	3405	O	LYS	H	19	63.194	29.813	41.252	1.00	19.19
ATOM	3406	CB	LYS	H	19	65.683	28.729	41.801	1.00	16.08
ATOM	3407	CG	LYS	H	19	65.442	27.349	41.284	1.00	19.95
ATOM	3408	CD	LYS	H	19	64.635	26.542	42.272	1.00	30.75
ATOM	3409	CE	LYS	H	19	65.069	25.042	42.296	1.00	38.00
ATOM	3410	NZ	LYS	H	19	64.080	24.155	43.048	1.00	41.42
ATOM	3411	N	LEU	H	20	63.745	30.203	39.143	1.00	9.06
ATOM	3412	CA	LEU	H	20	62.380	30.368	38.690	1.00	12.10
ATOM	3413	C	LEU	H	20	61.543	29.085	38.687	1.00	17.40
ATOM	3414	O	LEU	H	20	62.046	28.014	38.370	1.00	22.92
ATOM	3415	CB	LEU	H	20	62.412	30.964	37.291	1.00	12.04
ATOM	3416	CG	LEU	H	20	62.542	32.497	37.274	1.00	12.14
ATOM	3417	CD1	LEU	H	20	63.537	32.999	38.296	1.00	5.69
ATOM	3418	CD2	LEU	H	20	63.004	32.930	35.911	1.00	13.65

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ATOM	3419	N	SER	H	21	60.268	29.173	39.061	1.00	20.17
ATOM	3420	CA	SER	H	21	59.432	27.981	39.039	1.00	19.80
ATOM	3421	C	SER	H	21	58.250	28.244	38.169	1.00	16.80
ATOM	3422	O	SER	H	21	57.908	29.400	37.911	1.00	15.16
ATOM	3423	CB	SER	H	21	58.915	27.646	40.412	1.00	27.97
ATOM	3424	OG	SER	H	21	57.517	27.878	40.435	1.00	42.02
ATOM	3425	N	CYS	H	22	57.626	27.165	37.724	1.00	14.85
ATOM	3426	CA	CYS	H	22	56.454	27.269	36.866	1.00	18.78
ATOM	3427	C	CYS	H	22	55.565	26.061	37.139	1.00	24.53
ATOM	3428	O	CYS	H	22	55.985	24.919	36.937	1.00	26.59
ATOM	3429	CB	CYS	H	22	56.895	27.312	35.412	1.00	12.54
ATOM	3430	SG	CYS	H	22	55.718	26.698	34.180	1.00	10.76
ATOM	3431	N	LYS	H	23	54.341	26.312	37.617	1.00	26.88
ATOM	3432	CA	LYS	H	23	53.410	25.230	37.957	1.00	29.75
ATOM	3433	C	LYS	H	23	52.321	24.990	36.876	1.00	27.79
ATOM	3434	O	LYS	H	23	51.441	25.827	36.631	1.00	31.66
ATOM	3435	CB	LYS	H	23	52.796	25.531	39.335	1.00	29.85
ATOM	3436	CG	LYS	H	23	51.808	24.504	39.815	1.00	35.65
ATOM	3437	CD	LYS	H	23	51.709	24.511	41.322	1.00	41.27
ATOM	3438	CE	LYS	H	23	50.847	23.345	41.801	1.00	49.14
ATOM	3439	NZ	LYS	H	23	49.389	23.722	41.779	1.00	55.40
ATOM	3440	N	ALA	H	24	52.404	23.865	36.187	1.00	20.79
ATOM	3441	CA	ALA	H	24	51.422	23.607	35.154	1.00	21.70
ATOM	3442	C	ALA	H	24	50.207	23.048	35.814	1.00	23.78
ATOM	3443	O	ALA	H	24	50.241	22.744	37.008	1.00	23.81
ATOM	3444	CB	ALA	H	24	51.958	22.610	34.136	1.00	23.32
ATOM	3445	N	SER	H	25	49.146	22.909	35.015	1.00	25.55
ATOM	3446	CA	SER	H	25	47.861	22.356	35.452	1.00	24.93
ATOM	3447	C	SER	H	25	46.845	22.415	34.317	1.00	23.64
ATOM	3448	O	SER	H	25	46.924	23.279	33.429	1.00	24.47
ATOM	3449	CB	SER	H	25	47.296	23.137	36.631	1.00	24.33
ATOM	3450	OG	SER	H	25	46.499	24.212	36.171	1.00	24.09
ATOM	3451	N	GLY	H	26	45.874	21.517	34.355	1.00	18.47
ATOM	3452	CA	GLY	H	26	44.897	21.536	33.296	1.00	18.14
ATOM	3453	C	GLY	H	26	45.177	20.510	32.235	1.00	20.57
ATOM	3454	O	GLY	H	26	44.386	20.394	31.292	1.00	23.72
ATOM	3455	N	TYR	H	27	46.269	19.751	32.385	1.00	21.48
ATOM	3456	CA	TYR	H	27	46.642	18.721	31.400	1.00	18.42
ATOM	3457	C	TYR	H	27	47.600	17.733	31.999	1.00	15.48
ATOM	3458	O	TYR	H	27	48.016	17.919	33.134	1.00	17.84
ATOM	3459	CB	TYR	H	27	47.302	19.350	30.187	1.00	17.96
ATOM	3460	CG	TYR	H	27	48.619	20.007	30.475	1.00	15.46
ATOM	3461	CD1	TYR	H	27	48.691	21.194	31.197	1.00	14.78
ATOM	3462	CD2	TYR	H	27	49.783	19.487	29.959	1.00	14.72
ATOM	3463	CE1	TYR	H	27	49.909	21.864	31.394	1.00	18.45
ATOM	3464	CE2	TYR	H	27	50.983	20.131	30.139	1.00	20.94
ATOM	3465	CZ	TYR	H	27	51.054	21.338	30.861	1.00	21.48
ATOM	3466	OH	TYR	H	27	52.237	22.053	31.037	1.00	20.99
ATOM	3467	N	ILE	H	28	47.951	16.683	31.257	1.00	15.85
ATOM	3468	CA	ILE	H	28	48.904	15.713	31.796	1.00	17.56
ATOM	3469	C	ILE	H	28	50.294	16.347	31.650	1.00	19.14
ATOM	3470	O	ILE	H	28	50.789	16.625	30.534	1.00	14.96
ATOM	3471	CB	ILE	H	28	48.857	14.410	31.054	1.00	18.23
ATOM	3472	CG1	ILE	H	28	47.558	13.694	31.398	1.00	15.56
ATOM	3473	CG2	ILE	H	28	50.072	13.589	31.126	1.00	22.20
ATOM	3474	CD1	ILE	H	28	47.168	12.643	30.433	1.00	19.71
ATOM	3475	N	PHE	H	29	50.876	16.649	32.803	1.00	18.12
ATOM	3476	CA	PHE	H	29	52.174	17.305	32.880	1.00	16.65
ATOM	3477	C	PHE	H	29	53.299	16.679	32.071	1.00	23.89
ATOM	3478	O	PHE	H	29	53.939	17.322	31.224	1.00	29.83



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ATOM	3479	CB	PHE	H	29	52.601	17.353	34.316	1.00	7.88
ATOM	3480	CG	PHE	H	29	53.795	18.133	34.534	1.00	2.40
ATOM	3481	CD1	PHE	H	29	53.819	19.452	34.178	1.00	2.00
ATOM	3482	CD2	PHE	H	29	54.852	17.604	35.234	1.00	4.90
ATOM	3483	CE1	PHE	H	29	54.884	20.262	34.539	1.00	6.29
ATOM	3484	CE2	PHE	H	29	55.929	18.414	35.606	1.00	10.07
ATOM	3485	CZ	PHE	H	29	55.940	19.756	35.257	1.00	2.83
ATOM	3486	N	THR	H	30	53.512	15.394	32.320	1.00	24.14
ATOM	3487	CA	THR	H	30	54.568	14.639	31.669	1.00	19.41
ATOM	3488	C	THR	H	30	54.413	14.449	30.167	1.00	18.38
ATOM	3489	O	THR	H	30	55.324	13.998	29.531	1.00	26.29
ATOM	3490	CB	THR	H	30	54.639	13.245	32.211	1.00	18.03
ATOM	3491	OG1	THR	H	30	53.564	12.490	31.629	1.00	19.41
ATOM	3492	CG2	THR	H	30	54.586	13.241	33.743	1.00	8.10
ATOM	3493	N	SER	H	31	53.270	14.735	29.592	1.00	15.82
ATOM	3494	CA	SER	H	31	53.132	14.516	28.172	1.00	12.69
ATOM	3495	C	SER	H	31	53.475	15.753	27.364	1.00	6.94
ATOM	3496	O	SER	H	31	53.166	15.804	26.154	1.00	2.08
ATOM	3497	CB	SER	H	31	51.712	14.060	27.861	1.00	23.01
ATOM	3498	OG	SER	H	31	51.325	13.037	28.764	1.00	33.53
ATOM	3499	N	TYR	H	32	54.075	16.759	28.013	1.00	2.00
ATOM	3500	CA	TYR	H	32	54.463	17.973	27.264	1.00	10.47
ATOM	3501	C	TYR	H	32	55.817	18.539	27.583	1.00	12.02
ATOM	3502	O	TYR	H	32	56.162	18.729	28.739	1.00	11.11
ATOM	3503	CB	TYR	H	32	53.420	19.108	27.345	1.00	9.71
ATOM	3504	CG	TYR	H	32	52.121	18.694	26.707	1.00	12.61
ATOM	3505	CD1	TYR	H	32	51.923	18.811	25.356	1.00	7.67
ATOM	3506	CD2	TYR	H	32	51.170	18.000	27.446	1.00	19.75
ATOM	3507	CE1	TYR	H	32	50.831	18.240	24.764	1.00	14.84
ATOM	3508	CE2	TYR	H	32	50.078	17.426	26.863	1.00	15.68
ATOM	3509	CZ	TYR	H	32	49.906	17.541	25.524	1.00	15.42
ATOM	3510	OH	TYR	H	32	48.792	16.975	24.925	1.00	21.21
ATOM	3511	N	TYR	H	33	56.602	18.786	26.540	1.00	11.13
ATOM	3512	CA	TYR	H	33	57.900	19.317	26.791	1.00	7.27
ATOM	3513	C	TYR	H	33	57.639	20.735	27.202	1.00	5.60
ATOM	3514	O	TYR	H	33	56.881	21.473	26.574	1.00	3.67
ATOM	3515	CB	TYR	H	33	58.752	19.253	25.530	1.00	12.61
ATOM	3516	CG	TYR	H	33	59.575	17.999	25.413	1.00	11.71
ATOM	3517	CD1	TYR	H	33	58.964	16.759	25.324	1.00	16.48
ATOM	3518	CD2	TYR	H	33	60.963	18.048	25.412	1.00	12.62
ATOM	3519	CE1	TYR	H	33	59.713	15.583	25.240	1.00	20.50
ATOM	3520	CE2	TYR	H	33	61.733	16.876	25.328	1.00	14.82
ATOM	3521	CZ	TYR	H	33	61.092	15.640	25.242	1.00	18.63
ATOM	3522	OH	TYR	H	33	61.779	14.446	25.149	1.00	13.95
ATOM	3523	N	MET	H	34	58.251	21.103	28.300	1.00	4.75
ATOM	3524	CA	MET	H	34	58.114	22.436	28.795	1.00	5.34
ATOM	3525	C	MET	H	34	59.308	23.242	28.274	1.00	5.81
ATOM	3526	O	MET	H	34	60.450	22.832	28.442	1.00	8.85
ATOM	3527	CB	MET	H	34	58.119	22.398	30.328	1.00	6.45
ATOM	3528	CG	MET	H	34	57.684	23.701	30.989	1.00	16.87
ATOM	3529	SD	MET	H	34	56.129	24.303	30.289	1.00	24.50
ATOM	3530	CE	MET	H	34	54.978	23.764	31.581	1.00	28.13
ATOM	3531	N	TYR	H	35	59.058	24.369	27.626	1.00	2.00
ATOM	3532	CA	TYR	H	35	60.150	25.209	27.173	1.00	3.17
ATOM	3533	C	TYR	H	35	60.380	26.315	28.166	1.00	3.51
ATOM	3534	O	TYR	H	35	59.739	26.357	29.180	1.00	7.93
ATOM	3535	CB	TYR	H	35	59.806	25.901	25.874	1.00	5.78
ATOM	3536	CG	TYR	H	35	59.929	25.044	24.641	1.00	8.66
ATOM	3537	CD1	TYR	H	35	60.052	23.662	24.727	1.00	2.00
ATOM	3538	CD2	TYR	H	35	59.744	25.611	23.382	1.00	5.33

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ATOM	3539	CE1	TYR	H	35	59.958	22.871	23.590	1.00	2.01
ATOM	3540	CE2	TYR	H	35	59.652	24.831	22.252	1.00	7.66
ATOM	3541	CZ	TYR	H	35	59.747	23.464	22.356	1.00	4.59
ATOM	3542	OH	TYR	H	35	59.558	22.707	21.215	1.00	11.39
ATOM	3543	N	TRP	H	36	61.324	27.193	27.853	1.00	6.12
ATOM	3544	CA	TRP	H	36	61.602	28.398	28.623	1.00	9.79
ATOM	3545	C	TRP	H	36	62.084	29.454	27.586	1.00	14.99
ATOM	3546	O	TRP	H	36	62.938	29.187	26.741	1.00	18.71
ATOM	3547	CB	TRP	H	36	62.641	28.142	29.701	1.00	5.88
ATOM	3548	CG	TRP	H	36	62.100	27.298	30.802	1.00	11.30
ATOM	3549	CD1	TRP	H	36	61.998	25.932	30.811	1.00	13.24
ATOM	3550	CD2	TRP	H	36	61.662	27.738	32.091	1.00	9.20
ATOM	3551	NE1	TRP	H	36	61.531	25.496	32.030	1.00	14.65
ATOM	3552	CE2	TRP	H	36	61.320	26.583	32.833	1.00	10.99
ATOM	3553	CE3	TRP	H	36	61.527	28.990	32.689	1.00	11.92
ATOM	3554	CZ2	TRP	H	36	60.860	26.645	34.136	1.00	12.03
ATOM	3555	CZ3	TRP	H	36	61.073	29.056	33.981	1.00	14.66
ATOM	3556	CH2	TRP	H	36	60.744	27.888	34.697	1.00	16.18
ATOM	3557	N	VAL	H	37	61.489	30.636	27.612	1.00	13.38
ATOM	3558	CA	VAL	H	37	61.831	31.684	26.672	1.00	8.43
ATOM	3559	C	VAL	H	37	62.192	32.945	27.432	1.00	13.41
ATOM	3560	O	VAL	H	37	61.563	33.268	28.428	1.00	21.86
ATOM	3561	CB	VAL	H	37	60.633	31.944	25.829	1.00	3.34
ATOM	3562	CG1	VAL	H	37	60.928	32.971	24.771	1.00	4.90
ATOM	3563	CG2	VAL	H	37	60.190	30.644	25.264	1.00	2.10
ATOM	3564	N	LYS	H	38	63.220	33.651	26.995	1.00	12.71
ATOM	3565	CA	LYS	H	38	63.621	34.880	27.667	1.00	11.10
ATOM	3566	C	LYS	H	38	63.233	35.944	26.704	1.00	7.98
ATOM	3567	O	LYS	H	38	63.175	35.666	25.523	1.00	3.49
ATOM	3568	CB	LYS	H	38	65.140	34.881	27.919	1.00	17.45
ATOM	3569	CG	LYS	H	38	65.932	36.081	27.398	1.00	18.49
ATOM	3570	CD	LYS	H	38	66.797	36.731	28.508	1.00	27.55
ATOM	3571	CE	LYS	H	38	68.295	36.333	28.419	1.00	28.22
ATOM	3572	NZ	LYS	H	38	68.992	36.080	29.757	1.00	30.51
ATOM	3573	N	GLN	H	39	62.844	37.115	27.200	1.00	10.46
ATOM	3574	CA	GLN	H	39	62.508	38.244	26.311	1.00	14.42
ATOM	3575	C	GLN	H	39	63.000	39.415	27.138	1.00	19.27
ATOM	3576	O	GLN	H	39	62.504	39.627	28.231	1.00	23.46
ATOM	3577	CB	GLN	H	39	60.994	38.360	26.017	1.00	2.00
ATOM	3578	CG	GLN	H	39	60.588	39.755	25.535	1.00	3.44
ATOM	3579	CD	GLN	H	39	59.377	39.784	24.611	1.00	3.22
ATOM	3580	OE1	GLN	H	39	58.274	39.411	25.001	1.00	5.64
ATOM	3581	NE2	GLN	H	39	59.587	40.229	23.371	1.00	2.27
ATOM	3582	N	ALA	H	40	64.009	40.129	26.641	1.00	23.42
ATOM	3583	CA	ALA	H	40	64.595	41.236	27.373	1.00	26.72
ATOM	3584	C	ALA	H	40	64.147	42.560	26.850	1.00	34.20
ATOM	3585	O	ALA	H	40	63.917	42.717	25.658	1.00	33.76
ATOM	3586	CB	ALA	H	40	66.068	41.159	27.309	1.00	32.86
ATOM	3587	N	PRO	H	41	64.053	43.553	27.744	1.00	40.56
ATOM	3588	CA	PRO	H	41	63.616	44.890	27.367	1.00	41.26
ATOM	3589	C	PRO	H	41	64.052	45.193	25.977	1.00	41.19
ATOM	3590	O	PRO	H	41	65.239	45.220	25.708	1.00	42.29
ATOM	3591	CB	PRO	H	41	64.278	45.772	28.408	1.00	41.22
ATOM	3592	CG	PRO	H	41	64.186	44.917	29.651	1.00	41.15
ATOM	3593	CD	PRO	H	41	64.397	43.484	29.176	1.00	42.58
ATOM	3594	N	GLY	H	42	63.084	45.364	25.087	1.00	46.95
ATOM	3595	CA	GLY	H	42	63.391	45.681	23.701	1.00	56.65
ATOM	3596	C	GLY	H	42	63.936	44.482	22.954	1.00	60.35
ATOM	3597	O	GLY	H	42	63.690	44.309	21.748	1.00	61.89
ATOM	3598	N	GLN	H	43	64.708	43.670	23.674	1.00	60.32

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ATOM	3599	CA	GLN	H	43	65.262	42.454	23.117	1.00	59.39
ATOM	3600	C	GLN	H	43	64.092	41.486	22.800	1.00	56.89
ATOM	3601	O	GLN	H	43	63.017	41.544	23.425	1.00	56.32
ATOM	3602	CB	GLN	H	43	66.260	41.822	24.101	1.00	61.13
ATOM	3603	CG	GLN	H	43	67.290	40.895	23.418	1.00	65.01
ATOM	3604	CD	GLN	H	43	67.189	40.931	21.876	1.00	65.34
ATOM	3605	OE1	GLN	H	43	67.487	41.955	21.252	1.00	64.57
ATOM	3606	NE2	GLN	H	43	66.754	39.817	21.271	1.00	57.19
ATOM	3607	N	GLY	H	44	64.301	40.618	21.808	1.00	50.84
ATOM	3608	CA	GLY	H	44	63.264	39.695	21.397	1.00	38.12
ATOM	3609	C	GLY	H	44	63.025	38.463	22.228	1.00	30.55
ATOM	3610	O	GLY	H	44	63.403	38.381	23.408	1.00	25.06
ATOM	3611	N	LEU	H	45	62.361	37.510	21.576	1.00	23.84
ATOM	3612	CA	LEU	H	45	62.009	36.241	22.178	1.00	21.17
ATOM	3613	C	LEU	H	45	63.134	35.264	21.924	1.00	18.20
ATOM	3614	O	LEU	H	45	63.463	35.002	20.779	1.00	19.93
ATOM	3615	CB	LEU	H	45	60.720	35.706	21.550	1.00	23.94
ATOM	3616	CG	LEU	H	45	59.301	36.027	22.073	1.00	24.28
ATOM	3617	CD1	LEU	H	45	59.330	37.035	23.232	1.00	23.55
ATOM	3618	CD2	LEU	H	45	58.453	36.559	20.913	1.00	19.17
ATOM	3619	N	GLU	H	46	63.714	34.719	22.985	1.00	17.59
ATOM	3620	CA	GLU	H	46	64.826	33.774	22.861	1.00	15.88
ATOM	3621	C	GLU	H	46	64.503	32.477	23.576	1.00	16.17
ATOM	3622	O	GLU	H	46	64.052	32.494	24.710	1.00	21.56
ATOM	3623	CB	GLU	H	46	66.094	34.343	23.488	1.00	18.20
ATOM	3624	CG	GLU	H	46	66.737	35.513	22.776	1.00	19.83
ATOM	3625	CD	GLU	H	46	68.236	35.507	22.964	1.00	27.67
ATOM	3626	OE1	GLU	H	46	68.697	35.870	24.089	1.00	30.03
ATOM	3627	OE2	GLU	H	46	68.928	35.129	21.980	1.00	29.79
ATOM	3628	N	TRP	H	47	64.750	31.352	22.932	1.00	14.55
ATOM	3629	CA	TRP	H	47	64.450	30.067	23.540	1.00	12.90
ATOM	3630	C	TRP	H	47	65.660	29.706	24.336	1.00	12.12
ATOM	3631	O	TRP	H	47	66.759	29.784	23.831	1.00	12.63
ATOM	3632	CB	TRP	H	47	64.202	29.027	22.449	1.00	15.56
ATOM	3633	CG	TRP	H	47	63.873	27.647	22.925	1.00	18.86
ATOM	3634	CD1	TRP	H	47	62.642	27.175	23.216	1.00	19.15
ATOM	3635	CD2	TRP	H	47	64.770	26.525	23.045	1.00	24.08
ATOM	3636	NE1	TRP	H	47	62.700	25.833	23.508	1.00	21.57
ATOM	3637	CE2	TRP	H	47	63.993	25.407	23.401	1.00	24.30
ATOM	3638	CE3	TRP	H	47	66.152	26.364	22.874	1.00	26.51
ATOM	3639	CZ2	TRP	H	47	64.550	24.127	23.593	1.00	25.95
ATOM	3640	CZ3	TRP	H	47	66.708	25.095	23.066	1.00	26.79
ATOM	3641	CH2	TRP	H	47	65.906	23.993	23.419	1.00	25.28
ATOM	3642	N	ILE	H	48	65.455	29.349	25.594	1.00	13.63
ATOM	3643	CA	ILE	H	48	66.541	28.949	26.465	1.00	10.30
ATOM	3644	C	ILE	H	48	66.754	27.442	26.372	1.00	12.52
ATOM	3645	O	ILE	H	48	67.825	26.975	26.024	1.00	19.95
ATOM	3646	CB	ILE	H	48	66.227	29.314	27.920	1.00	9.06
ATOM	3647	CG1	ILE	H	48	66.323	30.830	28.087	1.00	6.61
ATOM	3648	CG2	ILE	H	48	67.149	28.564	28.892	1.00	5.16
ATOM	3649	CD1	ILE	H	48	65.409	31.358	29.185	1.00	17.92
ATOM	3650	N	GLY	H	49	65.741	26.662	26.678	1.00	10.17
ATOM	3651	CA	GLY	H	49	65.950	25.231	26.620	1.00	7.84
ATOM	3652	C	GLY	H	49	64.644	24.491	26.740	1.00	6.81
ATOM	3653	O	GLY	H	49	63.584	25.094	26.630	1.00	12.08
ATOM	3654	N	GLU	H	50	64.708	23.184	26.920	1.00	3.80
ATOM	3655	CA	GLU	H	50	63.522	22.369	27.029	1.00	4.48
ATOM	3656	C	GLU	H	50	63.790	21.322	28.079	1.00	7.31
ATOM	3657	O	GLU	H	50	64.933	21.025	28.386	1.00	9.12
ATOM	3658	CB	GLU	H	50	63.243	21.685	25.696	1.00	2.00

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ATOM	3659	CG	GLU	H	50	64.120	20.490	25.414	1.00	2.00
ATOM	3660	CD	GLU	H	50	63.843	19.912	24.053	1.00	6.10
ATOM	3661	OE1	GLU	H	50	62.718	20.111	23.553	1.00	9.43
ATOM	3662	OE2	GLU	H	50	64.738	19.266	23.469	1.00	11.67
ATOM	3663	N	ILE	H	51	62.718	20.780	28.645	1.00	12.03
ATOM	3664	CA	ILE	H	51	62.822	19.702	29.620	1.00	10.68
ATOM	3665	C	ILE	H	51	61.617	18.810	29.427	1.00	12.18
ATOM	3666	O	ILE	H	51	60.513	19.283	29.190	1.00	19.09
ATOM	3667	CB	ILE	H	51	62.805	20.202	31.021	1.00	8.39
ATOM	3668	CG1	ILE	H	51	63.165	19.053	31.959	1.00	2.00
ATOM	3669	CG2	ILE	H	51	61.462	20.887	31.297	1.00	12.16
ATOM	3670	CD1	ILE	H	51	64.076	19.569	33.066	1.00	2.00
ATOM	3671	N	ASN	H	52	61.829	17.515	29.411	1.00	13.27
ATOM	3672	CA	ASN	H	52	60.692	16.622	29.269	1.00	15.07
ATOM	3673	C	ASN	H	52	60.437	16.424	30.736	1.00	14.95
ATOM	3674	O	ASN	H	52	61.335	15.998	31.461	1.00	14.06
ATOM	3675	CB	ASN	H	52	61.131	15.331	28.601	1.00	16.65
ATOM	3676	CG	ASN	H	52	60.273	14.192	28.961	1.00	13.83
ATOM	3677	OD1	ASN	H	52	59.581	14.231	29.980	1.00	11.32
ATOM	3678	ND2	ASN	H	52	60.306	13.150	28.136	1.00	13.85
ATOM	3679	N	PRO	H	53	59.216	16.703	31.206	1.00	18.02
ATOM	3680	CA	PRO	H	53	59.108	16.498	32.658	1.00	18.18
ATOM	3681	C	PRO	H	53	58.972	15.041	33.092	1.00	14.41
ATOM	3682	O	PRO	H	53	59.364	14.691	34.214	1.00	13.76
ATOM	3683	CB	PRO	H	53	57.943	17.413	33.073	1.00	15.28
ATOM	3684	CG	PRO	H	53	57.071	17.486	31.796	1.00	18.69
ATOM	3685	CD	PRO	H	53	57.947	17.121	30.587	1.00	15.42
ATOM	3686	N	SER	H	54	58.480	14.188	32.195	1.00	4.74
ATOM	3687	CA	SER	H	54	58.357	12.793	32.540	1.00	4.44
ATOM	3688	C	SER	H	54	59.737	12.297	32.896	1.00	7.63
ATOM	3689	O	SER	H	54	59.943	11.653	33.922	1.00	2.00
ATOM	3690	CB	SER	H	54	57.872	11.991	31.346	1.00	8.43
ATOM	3691	OG	SER	H	54	58.705	10.864	31.132	1.00	13.64
ATOM	3692	N	ASN	H	55	60.681	12.698	32.036	1.00	18.13
ATOM	3693	CA	ASN	H	55	62.107	12.334	32.056	1.00	17.11
ATOM	3694	C	ASN	H	55	63.074	12.944	33.057	1.00	12.37
ATOM	3695	O	ASN	H	55	63.646	12.252	33.892	1.00	13.02
ATOM	3696	CB	ASN	H	55	62.704	12.597	30.674	1.00	20.98
ATOM	3697	CG	ASN	H	55	63.447	11.412	30.151	1.00	32.01
ATOM	3698	OD1	ASN	H	55	63.846	10.525	30.929	1.00	28.56
ATOM	3699	ND2	ASN	H	55	63.642	11.363	28.821	1.00	40.22
ATOM	3700	N	GLY	H	56	63.237	14.257	32.949	1.00	9.46
ATOM	3701	CA	GLY	H	56	64.206	15.003	33.732	1.00	3.07
ATOM	3702	C	GLY	H	56	65.107	15.509	32.605	1.00	2.00
ATOM	3703	O	GLY	H	56	65.732	16.560	32.651	1.00	2.00
ATOM	3704	N	ASP	H	57	65.074	14.742	31.519	1.00	3.10
ATOM	3705	CA	ASP	H	57	65.844	14.988	30.318	1.00	3.37
ATOM	3706	C	ASP	H	57	65.731	16.445	29.837	1.00	3.64
ATOM	3707	O	ASP	H	57	64.641	17.018	29.820	1.00	6.81
ATOM	3708	CB	ASP	H	57	65.351	14.005	29.240	1.00	5.97
ATOM	3709	CG	ASP	H	57	66.347	13.828	28.060	1.00	14.00
ATOM	3710	OD1	ASP	H	57	65.935	13.363	26.950	1.00	16.19
ATOM	3711	OD2	ASP	H	57	67.541	14.157	28.240	1.00	15.29
ATOM	3712	N	THR	H	58	66.849	17.031	29.414	1.00	2.00
ATOM	3713	CA	THR	H	58	66.838	18.402	28.915	1.00	2.00
ATOM	3714	C	THR	H	58	67.547	18.642	27.566	1.00	2.00
ATOM	3715	O	THR	H	58	68.221	17.775	26.963	1.00	3.96
ATOM	3716	CB	THR	H	58	67.476	19.338	29.927	1.00	2.12
ATOM	3717	OG1	THR	H	58	68.877	19.328	29.724	1.00	16.92
ATOM	3718	CG2	THR	H	58	67.293	18.832	31.294	1.00	10.63

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ATOM	3719	N	ASN	H	59	67.375	19.864	27.104	1.00	2.00
ATOM	3720	CA	ASN	H	59	67.992	20.304	25.892	1.00	3.72
ATOM	3721	C	ASN	H	59	68.102	21.825	25.864	1.00	6.65
ATOM	3722	O	ASN	H	59	67.116	22.511	25.870	1.00	17.89
ATOM	3723	CB	ASN	H	59	67.202	19.734	24.741	1.00	2.00
ATOM	3724	CG	ASN	H	59	67.663	18.326	24.392	1.00	13.03
ATOM	3725	OD1	ASN	H	59	68.795	18.118	23.963	1.00	25.07
ATOM	3726	ND2	ASN	H	59	66.798	17.357	24.574	1.00	16.27
ATOM	3727	N	PHE	H	60	69.308	22.369	25.823	1.00	10.13
ATOM	3728	CA	PHE	H	60	69.451	23.820	25.847	1.00	6.06
ATOM	3729	C	PHE	H	60	69.878	24.478	24.554	1.00	6.84
ATOM	3730	O	PHE	H	60	70.371	23.847	23.626	1.00	10.20
ATOM	3731	CB	PHE	H	60	70.460	24.192	26.904	1.00	4.24
ATOM	3732	CG	PHE	H	60	70.023	23.868	28.285	1.00	6.68
ATOM	3733	CD1	PHE	H	60	69.909	22.544	28.695	1.00	2.00
ATOM	3734	CD2	PHE	H	60	69.734	24.916	29.190	1.00	10.21
ATOM	3735	CE1	PHE	H	60	69.514	22.255	29.982	1.00	6.42
ATOM	3736	CE2	PHE	H	60	69.333	24.664	30.510	1.00	4.77
ATOM	3737	CZ	PHE	H	60	69.221	23.323	30.920	1.00	8.53
ATOM	3738	N	ASN	H	61	69.678	25.771	24.492	1.00	9.03
ATOM	3739	CA	ASN	H	61	70.126	26.507	23.339	1.00	12.79
ATOM	3740	C	ASN	H	61	71.545	26.796	23.804	1.00	16.26
ATOM	3741	O	ASN	H	61	71.748	27.377	24.876	1.00	12.78
ATOM	3742	CB	ASN	H	61	69.341	27.808	23.192	1.00	17.42
ATOM	3743	CG	ASN	H	61	70.005	28.797	22.256	1.00	21.53
ATOM	3744	OD1	ASN	H	61	71.102	28.563	21.738	1.00	27.11
ATOM	3745	ND2	ASN	H	61	69.352	29.928	22.052	1.00	24.10
ATOM	3746	N	GLU	H	62	72.513	26.356	23.009	1.00	19.11
ATOM	3747	CA	GLU	H	62	73.926	26.539	23.328	1.00	19.19
ATOM	3748	C	GLU	H	62	74.159	27.886	23.973	1.00	14.12
ATOM	3749	O	GLU	H	62	74.786	27.987	25.028	1.00	16.37
ATOM	3750	CB	GLU	H	62	74.783	26.427	22.047	1.00	23.39
ATOM	3751	CG	GLU	H	62	76.019	25.546	22.205	1.00	23.93
ATOM	3752	CD	GLU	H	62	75.634	24.140	22.459	1.00	28.93
ATOM	3753	OE1	GLU	H	62	75.900	23.665	23.575	1.00	37.40
ATOM	3754	OE2	GLU	H	62	75.050	23.514	21.553	1.00	33.26
ATOM	3755	N	LYS	H	63	73.635	28.909	23.326	1.00	5.16
ATOM	3756	CA	LYS	H	63	73.782	30.255	23.792	1.00	7.92
ATOM	3757	C	LYS	H	63	73.462	30.449	25.256	1.00	11.25
ATOM	3758	O	LYS	H	63	73.767	31.510	25.784	1.00	15.83
ATOM	3759	CB	LYS	H	63	72.927	31.176	22.919	1.00	12.39
ATOM	3760	CG	LYS	H	63	72.408	32.439	23.584	1.00	19.94
ATOM	3761	CD	LYS	H	63	73.385	33.616	23.581	1.00	32.18
ATOM	3762	CE	LYS	H	63	72.831	34.820	24.384	1.00	36.50
ATOM	3763	NZ	LYS	H	63	73.351	36.163	23.921	1.00	42.93
ATOM	3764	N	PHE	H	64	72.873	29.437	25.909	1.00	16.35
ATOM	3765	CA	PHE	H	64	72.464	29.510	27.329	1.00	17.29
ATOM	3766	C	PHE	H	64	72.857	28.313	28.151	1.00	21.51
ATOM	3767	O	PHE	H	64	72.498	28.242	29.319	1.00	24.17
ATOM	3768	CB	PHE	H	64	70.941	29.607	27.485	1.00	10.43
ATOM	3769	CG	PHE	H	64	70.357	30.916	27.051	1.00	5.33
ATOM	3770	CD1	PHE	H	64	70.083	31.159	25.706	1.00	6.12
ATOM	3771	CD2	PHE	H	64	70.082	31.894	27.966	1.00	2.00
ATOM	3772	CE1	PHE	H	64	69.559	32.348	25.284	1.00	2.00
ATOM	3773	CE2	PHE	H	64	69.555	33.091	27.549	1.00	7.08
ATOM	3774	CZ	PHE	H	64	69.297	33.318	26.201	1.00	5.79
ATOM	3775	N	LYS	H	65	73.567	27.369	27.548	1.00	26.74
ATOM	3776	CA	LYS	H	65	73.970	26.150	28.235	1.00	24.83
ATOM	3777	C	LYS	H	65	74.548	26.412	29.617	1.00	25.17
ATOM	3778	O	LYS	H	65	74.388	25.613	30.537	1.00	21.45

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ATOM	3779	CB	LYS	H	65	74.975	25.401	27.368	1.00	24.88
ATOM	3780	CG	LYS	H	65	74.726	23.923	27.315	1.00	30.59
ATOM	3781	CD	LYS	H	65	74.598	23.371	28.739	1.00	45.86
ATOM	3782	CE	LYS	H	65	73.110	23.192	29.188	1.00	51.06
ATOM	3783	NZ	LYS	H	65	72.755	23.762	30.540	1.00	45.25
ATOM	3784	N	SER	H	66	75.196	27.562	29.755	1.00	28.21
ATOM	3785	CA	SER	H	66	75.813	27.946	31.003	1.00	29.98
ATOM	3786	C	SER	H	66	74.839	28.574	31.985	1.00	28.87
ATOM	3787	O	SER	H	66	74.818	28.154	33.143	1.00	35.89
ATOM	3788	CB	SER	H	66	76.925	28.926	30.726	1.00	33.63
ATOM	3789	OG	SER	H	66	76.384	30.024	30.016	1.00	43.10
ATOM	3790	N	LYS	H	67	74.035	29.549	31.535	1.00	23.77
ATOM	3791	CA	LYS	H	67	73.079	30.253	32.404	1.00	20.85
ATOM	3792	C	LYS	H	67	71.921	29.491	33.012	1.00	21.18
ATOM	3793	O	LYS	H	67	71.522	29.783	34.135	1.00	27.12
ATOM	3794	CB	LYS	H	67	72.487	31.466	31.702	1.00	16.56
ATOM	3795	CG	LYS	H	67	72.798	32.765	32.426	1.00	24.87
ATOM	3796	CD	LYS	H	67	74.256	33.234	32.217	1.00	33.34
ATOM	3797	CE	LYS	H	67	74.367	34.632	31.536	1.00	34.81
ATOM	3798	NZ	LYS	H	67	74.915	34.621	30.122	1.00	38.08
ATOM	3799	N	ALA	H	68	71.406	28.489	32.326	1.00	15.07
ATOM	3800	CA	ALA	H	68	70.240	27.820	32.840	1.00	13.62
ATOM	3801	C	ALA	H	68	70.369	26.432	33.365	1.00	16.23
ATOM	3802	O	ALA	H	68	71.251	25.711	32.981	1.00	21.62
ATOM	3803	CB	ALA	H	68	69.193	27.836	31.784	1.00	17.88
ATOM	3804	N	THR	H	69	69.417	26.041	34.207	1.00	16.45
ATOM	3805	CA	THR	H	69	69.396	24.706	34.769	1.00	13.87
ATOM	3806	C	THR	H	69	67.952	24.250	34.882	1.00	13.16
ATOM	3807	O	THR	H	69	67.294	24.486	35.871	1.00	18.51
ATOM	3808	CB	THR	H	69	70.030	24.681	36.156	1.00	11.01
ATOM	3809	OG1	THR	H	69	71.114	25.600	36.184	1.00	19.11
ATOM	3810	CG2	THR	H	69	70.563	23.338	36.481	1.00	9.33
ATOM	3811	N	LEU	H	70	67.460	23.588	33.858	1.00	10.67
ATOM	3812	CA	LEU	H	70	66.108	23.081	33.862	1.00	11.13
ATOM	3813	C	LEU	H	70	65.946	21.849	34.781	1.00	13.36
ATOM	3814	O	LEU	H	70	66.760	20.920	34.778	1.00	15.49
ATOM	3815	CB	LEU	H	70	65.723	22.739	32.417	1.00	10.44
ATOM	3816	CG	LEU	H	70	65.872	23.956	31.481	1.00	8.53
ATOM	3817	CD1	LEU	H	70	65.054	23.696	30.187	1.00	5.13
ATOM	3818	CD2	LEU	H	70	65.489	25.269	32.180	1.00	2.00
ATOM	3819	N	THR	H	71	64.845	21.811	35.520	1.00	15.44
ATOM	3820	CA	THR	H	71	64.585	20.702	36.426	1.00	14.26
ATOM	3821	C	THR	H	71	63.079	20.637	36.649	1.00	12.85
ATOM	3822	O	THR	H	71	62.408	21.633	36.383	1.00	16.56
ATOM	3823	CB	THR	H	71	65.305	20.932	37.713	1.00	8.24
ATOM	3824	OG1	THR	H	71	64.368	20.948	38.771	1.00	17.91
ATOM	3825	CG2	THR	H	71	65.994	22.224	37.679	1.00	7.43
ATOM	3826	N	VAL	H	72	62.524	19.491	37.076	1.00	8.71
ATOM	3827	CA	VAL	H	72	61.074	19.444	37.290	1.00	9.16
ATOM	3828	C	VAL	H	72	60.635	18.579	38.440	1.00	12.29
ATOM	3829	O	VAL	H	72	61.332	17.663	38.815	1.00	20.22
ATOM	3830	CB	VAL	H	72	60.284	18.983	36.020	1.00	8.41
ATOM	3831	CG1	VAL	H	72	61.082	19.234	34.808	1.00	13.75
ATOM	3832	CG2	VAL	H	72	59.898	17.517	36.080	1.00	8.72
ATOM	3833	N	ASP	H	73	59.488	18.878	39.035	1.00	17.39
ATOM	3834	CA	ASP	H	73	58.984	18.044	40.117	1.00	20.97
ATOM	3835	C	ASP	H	73	57.741	17.312	39.635	1.00	18.90
ATOM	3836	O	ASP	H	73	56.612	17.646	39.966	1.00	19.12
ATOM	3837	CB	ASP	H	73	58.655	18.829	41.393	1.00	28.43
ATOM	3838	CG	ASP	H	73	57.841	17.984	42.399	1.00	39.45

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ATOM	3839	OD1	ASP	H	73	57.688	16.751	42.175	1.00	38.04
ATOM	3840	OD2	ASP	H	73	57.348	18.542	43.410	1.00	48.03
ATOM	3841	N	LYS	H	74	57.974	16.303	38.825	1.00	19.19
ATOM	3842	CA	LYS	H	74	56.901	15.484	38.307	1.00	22.27
ATOM	3843	C	LYS	H	74	55.665	15.472	39.245	1.00	23.26
ATOM	3844	O	LYS	H	74	54.530	15.726	38.818	1.00	18.65
ATOM	3845	CB	LYS	H	74	57.447	14.065	38.131	1.00	20.87
ATOM	3846	CG	LYS	H	74	57.063	13.380	36.836	1.00	19.88
ATOM	3847	CD	LYS	H	74	57.030	11.872	37.025	1.00	24.54
ATOM	3848	CE	LYS	H	74	58.259	11.162	36.482	1.00	28.79
ATOM	3849	NZ	LYS	H	74	57.816	10.048	35.596	1.00	37.70
ATOM	3850	N	SER	H	75	55.891	15.169	40.521	1.00	25.00
ATOM	3851	CA	SER	H	75	54.783	15.114	41.477	1.00	28.76
ATOM	3852	C	SER	H	75	54.040	16.461	41.551	1.00	28.62
ATOM	3853	O	SER	H	75	52.831	16.562	41.295	1.00	29.58
ATOM	3854	CB	SER	H	75	55.297	14.747	42.872	1.00	29.29
ATOM	3855	OG	SER	H	75	54.983	15.792	43.779	1.00	35.59
ATOM	3856	N	ALA	H	76	54.769	17.508	41.891	1.00	24.74
ATOM	3857	CA	ALA	H	76	54.139	18.801	41.998	1.00	24.95
ATOM	3858	C	ALA	H	76	53.796	19.412	40.641	1.00	24.67
ATOM	3859	O	ALA	H	76	53.458	20.597	40.557	1.00	21.54
ATOM	3860	CB	ALA	H	76	55.032	19.741	42.778	1.00	28.25
ATOM	3861	N	SER	H	77	53.904	18.620	39.579	1.00	23.61
ATOM	3862	CA	SER	H	77	53.605	19.132	38.254	1.00	21.74
ATOM	3863	C	SER	H	77	54.206	20.541	38.070	1.00	19.34
ATOM	3864	O	SER	H	77	53.516	21.491	37.709	1.00	12.28
ATOM	3865	CB	SER	H	77	52.109	19.170	38.096	1.00	19.44
ATOM	3866	OG	SER	H	77	51.805	19.695	36.831	1.00	31.31
ATOM	3867	N	THR	H	78	55.513	20.648	38.310	1.00	22.14
ATOM	3868	CA	THR	H	78	56.209	21.937	38.261	1.00	21.56
ATOM	3869	C	THR	H	78	57.601	21.882	37.672	1.00	20.37
ATOM	3870	O	THR	H	78	58.349	20.947	37.878	1.00	25.17
ATOM	3871	CB	THR	H	78	56.347	22.509	39.700	1.00	20.01
ATOM	3872	OG1	THR	H	78	55.043	22.747	40.229	1.00	23.14
ATOM	3873	CG2	THR	H	78	57.142	23.789	39.742	1.00	11.01
ATOM	3874	N	ALA	H	79	57.954	22.923	36.959	1.00	17.02
ATOM	3875	CA	ALA	H	79	59.256	22.990	36.380	1.00	18.03
ATOM	3876	C	ALA	H	79	59.988	24.135	37.063	1.00	19.71
ATOM	3877	O	ALA	H	79	59.373	25.045	37.610	1.00	24.57
ATOM	3878	CB	ALA	H	79	59.126	23.264	34.917	1.00	21.23
ATOM	3879	N	TYR	H	80	61.309	24.123	36.994	1.00	20.27
ATOM	3880	CA	TYR	H	80	62.093	25.175	37.599	1.00	16.84
ATOM	3881	C	TYR	H	80	63.254	25.507	36.680	1.00	18.92
ATOM	3882	O	TYR	H	80	63.741	24.637	35.959	1.00	20.53
ATOM	3883	CB	TYR	H	80	62.643	24.699	38.910	1.00	13.57
ATOM	3884	CG	TYR	H	80	61.599	24.230	39.854	1.00	18.34
ATOM	3885	CD1	TYR	H	80	61.315	24.971	41.013	1.00	16.06
ATOM	3886	CD2	TYR	H	80	60.924	23.019	39.640	1.00	19.18
ATOM	3887	CE1	TYR	H	80	60.398	24.530	41.946	1.00	17.95
ATOM	3888	CE2	TYR	H	80	59.984	22.558	40.579	1.00	25.39
ATOM	3889	CZ	TYR	H	80	59.733	23.326	41.734	1.00	22.63
ATOM	3890	OH	TYR	H	80	58.819	22.888	42.664	1.00	27.86
ATOM	3891	N	MET	H	81	63.656	26.773	36.673	1.00	20.18
ATOM	3892	CA	MET	H	81	64.793	27.232	35.889	1.00	21.00
ATOM	3893	C	MET	H	81	65.680	27.960	36.846	1.00	26.76
ATOM	3894	O	MET	H	81	65.211	28.805	37.592	1.00	29.73
ATOM	3895	CB	MET	H	81	64.400	28.232	34.809	1.00	19.68
ATOM	3896	CG	MET	H	81	65.629	28.813	34.065	1.00	15.00
ATOM	3897	SD	MET	H	81	65.253	29.514	32.393	1.00	14.84
ATOM	3898	CE	MET	H	81	64.266	31.009	32.978	1.00	22.36

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ATOM	3899	N	GLU	H	82	66.970	27.673	36.796	1.00	33.77
ATOM	3900	CA	GLU	H	82	67.909	28.323	37.697	1.00	36.03
ATOM	3901	C	GLU	H	82	68.972	29.043	36.890	1.00	35.07
ATOM	3902	O	GLU	H	82	69.811	28.424	36.230	1.00	37.44
ATOM	3903	CB	GLU	H	82	68.564	27.286	38.607	1.00	41.22
ATOM	3904	CG	GLU	H	82	69.213	27.868	39.855	1.00	48.37
ATOM	3905	CD	GLU	H	82	69.823	26.797	40.747	1.00	53.98
ATOM	3906	OE1	GLU	H	82	69.094	25.867	41.162	1.00	60.35
ATOM	3907	OE2	GLU	H	82	71.034	26.877	41.039	1.00	56.70
ATOM	3908	N	LEU	H	83	68.910	30.360	36.910	1.00	32.26
ATOM	3909	CA	LEU	H	83	69.878	31.144	36.185	1.00	32.64
ATOM	3910	C	LEU	H	83	70.930	31.438	37.215	1.00	34.17
ATOM	3911	O	LEU	H	83	70.617	31.779	38.348	1.00	36.84
ATOM	3912	CB	LEU	H	83	69.227	32.425	35.661	1.00	33.23
ATOM	3913	CG	LEU	H	83	67.945	32.120	34.872	1.00	35.01
ATOM	3914	CD1	LEU	H	83	67.086	33.365	34.795	1.00	35.85
ATOM	3915	CD2	LEU	H	83	68.267	31.613	33.485	1.00	32.61
ATOM	3916	N	SER	H	84	72.184	31.296	36.829	1.00	36.42
ATOM	3917	CA	SER	H	84	73.272	31.526	37.759	1.00	38.68
ATOM	3918	C	SER	H	84	74.272	32.532	37.224	1.00	40.25
ATOM	3919	O	SER	H	84	74.315	32.827	36.009	1.00	39.28
ATOM	3920	CB	SER	H	84	73.996	30.210	38.069	1.00	37.57
ATOM	3921	OG	SER	H	84	73.853	29.287	36.998	1.00	39.76
ATOM	3922	N	SER	H	85	75.075	33.058	38.150	1.00	41.06
ATOM	3923	CA	SER	H	85	76.104	34.021	37.808	1.00	41.36
ATOM	3924	C	SER	H	85	75.449	35.035	36.882	1.00	40.09
ATOM	3925	O	SER	H	85	75.775	35.133	35.694	1.00	39.83
ATOM	3926	CB	SER	H	85	77.272	33.312	37.102	1.00	43.46
ATOM	3927	OG	SER	H	85	76.824	32.287	36.219	1.00	51.13
ATOM	3928	N	LEU	H	86	74.493	35.769	37.434	1.00	38.14
ATOM	3929	CA	LEU	H	86	73.778	36.740	36.642	1.00	36.83
ATOM	3930	C	LEU	H	86	74.561	37.985	36.332	1.00	36.52
ATOM	3931	O	LEU	H	86	75.080	38.633	37.222	1.00	38.52
ATOM	3932	CB	LEU	H	86	72.473	37.105	37.332	1.00	33.12
ATOM	3933	CG	LEU	H	86	71.587	35.868	37.380	1.00	35.39
ATOM	3934	CD1	LEU	H	86	70.707	35.897	38.610	1.00	40.57
ATOM	3935	CD2	LEU	H	86	70.747	35.822	36.134	1.00	34.99
ATOM	3936	N	ARG	H	87	74.683	38.289	35.051	1.00	37.35
ATOM	3937	CA	ARG	H	87	75.344	39.510	34.633	1.00	40.13
ATOM	3938	C	ARG	H	87	74.173	40.453	34.553	1.00	39.91
ATOM	3939	O	ARG	H	87	73.041	40.045	34.775	1.00	39.08
ATOM	3940	CB	ARG	H	87	75.953	39.392	33.238	1.00	44.41
ATOM	3941	CG	ARG	H	87	76.845	38.186	33.010	1.00	52.95
ATOM	3942	CD	ARG	H	87	76.491	37.469	31.692	1.00	57.87
ATOM	3943	NE	ARG	H	87	76.941	38.187	30.489	1.00	63.88
ATOM	3944	CZ	ARG	H	87	78.218	38.357	30.132	1.00	65.56
ATOM	3945	NH1	ARG	H	87	79.199	37.873	30.887	1.00	66.51
ATOM	3946	NH2	ARG	H	87	78.519	39.004	29.008	1.00	65.68
ATOM	3947	N	SER	H	88	74.427	41.696	34.184	1.00	42.08
ATOM	3948	CA	SER	H	88	73.354	42.673	34.082	1.00	44.25
ATOM	3949	C	SER	H	88	72.465	42.394	32.856	1.00	42.94
ATOM	3950	O	SER	H	88	71.246	42.571	32.901	1.00	46.92
ATOM	3951	CB	SER	H	88	73.947	44.079	33.983	1.00	43.37
ATOM	3952	OG	SER	H	88	73.681	44.644	32.712	1.00	45.06
ATOM	3953	N	GLU	H	89	73.063	41.959	31.761	1.00	37.68
ATOM	3954	CA	GLU	H	89	72.274	41.702	30.573	1.00	39.09
ATOM	3955	C	GLU	H	89	71.374	40.470	30.719	1.00	38.78
ATOM	3956	O	GLU	H	89	70.718	40.023	29.768	1.00	38.52
ATOM	3957	CB	GLU	H	89	73.185	41.574	29.355	1.00	41.33
ATOM	3958	CG	GLU	H	89	74.424	42.452	29.422	1.00	43.31



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ATOM	3959	CD	GLU	H	89	75.465	41.858	30.340	1.00	45.54
ATOM	3960	OE1	GLU	H	89	76.176	42.625	31.028	1.00	49.09
ATOM	3961	OE2	GLU	H	89	75.563	40.612	30.378	1.00	45.87
ATOM	3962	N	ASP	H	90	71.334	39.927	31.924	1.00	37.39
ATOM	3963	CA	ASP	H	90	70.486	38.784	32.173	1.00	37.35
ATOM	3964	C	ASP	H	90	69.055	39.225	32.508	1.00	36.39
ATOM	3965	O	ASP	H	90	68.125	38.411	32.510	1.00	36.10
ATOM	3966	CB	ASP	H	90	71.077	37.968	33.312	1.00	41.03
ATOM	3967	CG	ASP	H	90	72.118	36.987	32.832	1.00	40.38
ATOM	3968	OD1	ASP	H	90	72.251	36.857	31.595	1.00	40.69
ATOM	3969	OD2	ASP	H	90	72.788	36.356	33.685	1.00	40.54
ATOM	3970	N	THR	H	91	68.879	40.523	32.762	1.00	34.68
ATOM	3971	CA	THR	H	91	67.565	41.077	33.100	1.00	34.53
ATOM	3972	C	THR	H	91	66.584	40.941	31.944	1.00	33.02
ATOM	3973	O	THR	H	91	66.916	41.252	30.794	1.00	32.77
ATOM	3974	CB	THR	H	91	67.640	42.570	33.435	1.00	37.46
ATOM	3975	OG1	THR	H	91	68.718	42.808	34.342	1.00	42.30
ATOM	3976	CG2	THR	H	91	66.352	43.031	34.080	1.00	37.25
ATOM	3977	N	ALA	H	92	65.366	40.503	32.264	1.00	30.88
ATOM	3978	CA	ALA	H	92	64.316	40.319	31.262	1.00	28.62
ATOM	3979	C	ALA	H	92	63.139	39.540	31.848	1.00	25.58
ATOM	3980	O	ALA	H	92	63.032	39.348	33.062	1.00	26.05
ATOM	3981	CB	ALA	H	92	64.879	39.558	30.047	1.00	32.45
ATOM	3982	N	VAL	H	93	62.244	39.091	30.978	1.00	21.48
ATOM	3983	CA	VAL	H	93	61.143	38.295	31.452	1.00	22.22
ATOM	3984	C	VAL	H	93	61.312	36.873	30.929	1.00	23.91
ATOM	3985	O	VAL	H	93	61.508	36.625	29.735	1.00	20.59
ATOM	3986	CB	VAL	H	93	59.782	38.853	31.050	1.00	16.65
ATOM	3987	CG1	VAL	H	93	58.674	37.997	31.683	1.00	17.36
ATOM	3988	CG2	VAL	H	93	59.659	40.245	31.549	1.00	13.12
ATOM	3989	N	TYR	H	94	61.220	35.946	31.867	1.00	20.94
ATOM	3990	CA	TYR	H	94	61.384	34.565	31.584	1.00	20.07
ATOM	3991	C	TYR	H	94	60.007	33.949	31.588	1.00	21.06
ATOM	3992	O	TYR	H	94	59.290	34.057	32.572	1.00	27.21
ATOM	3993	CB	TYR	H	94	62.281	34.011	32.666	1.00	23.51
ATOM	3994	CG	TYR	H	94	63.683	34.552	32.500	1.00	28.24
ATOM	3995	CD1	TYR	H	94	64.073	35.766	33.098	1.00	29.28
ATOM	3996	CD2	TYR	H	94	64.595	33.907	31.663	1.00	26.21
ATOM	3997	CE1	TYR	H	94	65.330	36.321	32.856	1.00	24.14
ATOM	3998	CE2	TYR	H	94	65.841	34.448	31.420	1.00	23.27
ATOM	3999	CZ	TYR	H	94	66.202	35.657	32.016	1.00	25.81
ATOM	4000	OH	TYR	H	94	67.439	36.204	31.773	1.00	29.23
ATOM	4001	N	TYR	H	95	59.647	33.323	30.471	1.00	17.45
ATOM	4002	CA	TYR	H	95	58.354	32.679	30.290	1.00	14.44
ATOM	4003	C	TYR	H	95	58.558	31.191	30.332	1.00	17.43
ATOM	4004	O	TYR	H	95	59.598	30.699	29.920	1.00	20.08
ATOM	4005	CB	TYR	H	95	57.762	33.023	28.916	1.00	15.05
ATOM	4006	CG	TYR	H	95	57.203	34.425	28.834	1.00	20.47
ATOM	4007	CD1	TYR	H	95	56.237	34.838	29.727	1.00	22.39
ATOM	4008	CD2	TYR	H	95	57.663	35.351	27.902	1.00	21.05
ATOM	4009	CE1	TYR	H	95	55.736	36.116	29.712	1.00	23.46
ATOM	4010	CE2	TYR	H	95	57.157	36.657	27.881	1.00	21.46
ATOM	4011	CZ	TYR	H	95	56.188	37.017	28.796	1.00	23.78
ATOM	4012	OH	TYR	H	95	55.609	38.261	28.802	1.00	30.68
ATOM	4013	N	CYS	H	96	57.595	30.465	30.887	1.00	16.84
ATOM	4014	CA	CYS	H	96	57.661	29.011	30.860	1.00	14.90
ATOM	4015	C	CYS	H	96	56.528	28.735	29.864	1.00	9.31
ATOM	4016	O	CYS	H	96	55.545	29.429	29.863	1.00	11.45
ATOM	4017	CB	CYS	H	96	57.399	28.407	32.261	1.00	16.13
ATOM	4018	SG	CYS	H	96	55.673	28.205	32.823	1.00	19.61

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ATOM	4019	N	THR	H	97	56.675	27.810	28.942	1.00	6.59
ATOM	4020	CA	THR	H	97	55.560	27.566	28.037	1.00	6.51
ATOM	4021	C	THR	H	97	55.578	26.126	27.568	1.00	7.32
ATOM	4022	O	THR	H	97	56.646	25.527	27.385	1.00	13.37
ATOM	4023	CB	THR	H	97	55.580	28.468	26.814	1.00	6.87
ATOM	4024	OG1	THR	H	97	54.943	27.790	25.720	1.00	8.72
ATOM	4025	CG2	THR	H	97	56.984	28.792	26.448	1.00	16.81
ATOM	4026	N	ARG	H	98	54.376	25.590	27.396	1.00	2.81
ATOM	4027	CA	ARG	H	98	54.124	24.217	26.987	1.00	3.26
ATOM	4028	C	ARG	H	98	54.262	24.029	25.496	1.00	2.68
ATOM	4029	O	ARG	H	98	53.585	24.692	24.715	1.00	2.02
ATOM	4030	CB	ARG	H	98	52.712	23.845	27.402	1.00	9.15
ATOM	4031	CG	ARG	H	98	52.463	22.379	27.704	1.00	16.05
ATOM	4032	CD	ARG	H	98	51.499	21.820	26.681	1.00	22.59
ATOM	4033	NE	ARG	H	98	50.140	21.639	27.178	1.00	19.96
ATOM	4034	CZ	ARG	H	98	49.042	21.744	26.430	1.00	21.66
ATOM	4035	NH1	ARG	H	98	49.109	22.035	25.126	1.00	12.83
ATOM	4036	NH2	ARG	H	98	47.864	21.517	26.992	1.00	27.33
ATOM	4037	N	SER	H	99	55.163	23.145	25.098	1.00	2.84
ATOM	4038	CA	SER	H	99	55.361	22.910	23.679	1.00	7.76
ATOM	4039	C	SER	H	99	54.411	21.804	23.322	1.00	9.54
ATOM	4040	O	SER	H	99	54.209	20.866	24.105	1.00	8.75
ATOM	4041	CB	SER	H	99	56.780	22.450	23.374	1.00	6.06
ATOM	4042	OG	SER	H	99	56.805	21.031	23.391	1.00	16.80
ATOM	4043	N	ASP	H	100	53.865	21.897	22.121	1.00	10.64
ATOM	4044	CA	ASP	H	100	52.898	20.923	21.652	1.00	13.15
ATOM	4045	C	ASP	H	100	53.604	20.027	20.628	1.00	13.68
ATOM	4046	O	ASP	H	100	53.612	20.285	19.403	1.00	11.66
ATOM	4047	CB	ASP	H	100	51.708	21.680	21.047	1.00	18.52
ATOM	4048	CG	ASP	H	100	50.681	20.755	20.407	1.00	20.57
ATOM	4049	OD1	ASP	H	100	50.004	21.174	19.422	1.00	21.29
ATOM	4050	OD2	ASP	H	100	50.564	19.609	20.900	1.00	12.20
ATOM	4051	N	GLY	H	101	54.223	18.971	21.143	1.00	16.20
ATOM	4052	CA	GLY	H	101	54.979	18.069	20.281	1.00	18.19
ATOM	4053	C	GLY	H	101	56.316	18.742	19.938	1.00	19.14
ATOM	4054	O	GLY	H	101	56.951	18.481	18.919	1.00	22.29
ATOM	4055	N	ARG	H	102	56.748	19.634	20.818	1.00	18.27
ATOM	4056	CA	ARG	H	102	57.981	20.378	20.638	1.00	10.30
ATOM	4057	C	ARG	H	102	57.992	21.118	19.335	1.00	7.64
ATOM	4058	O	ARG	H	102	58.961	21.105	18.629	1.00	13.28
ATOM	4059	CB	ARG	H	102	59.188	19.453	20.750	1.00	9.62
ATOM	4060	CG	ARG	H	102	59.390	18.933	22.182	1.00	10.87
ATOM	4061	CD	ARG	H	102	60.280	17.677	22.276	1.00	7.11
ATOM	4062	NE	ARG	H	102	61.675	18.086	22.216	1.00	8.08
ATOM	4063	CZ	ARG	H	102	62.438	17.966	21.138	1.00	8.91
ATOM	4064	NH1	ARG	H	102	61.921	17.438	20.029	1.00	2.00
ATOM	4065	NH2	ARG	H	102	63.702	18.426	21.162	1.00	15.02
ATOM	4066	N	ASN	H	103	56.890	21.761	19.011	1.00	9.08
ATOM	4067	CA	ASN	H	103	56.818	22.556	17.806	1.00	12.14
ATOM	4068	C	ASN	H	103	56.154	23.877	18.120	1.00	16.04
ATOM	4069	O	ASN	H	103	56.860	24.838	18.447	1.00	26.49
ATOM	4070	CB	ASN	H	103	56.066	21.834	16.737	1.00	11.12
ATOM	4071	CG	ASN	H	103	56.902	20.795	16.096	1.00	12.92
ATOM	4072	OD1	ASN	H	103	56.826	19.632	16.466	1.00	14.62
ATOM	4073	ND2	ASN	H	103	57.734	21.199	15.141	1.00	15.37
ATOM	4074	N	ASP	H	104	54.830	23.961	18.012	1.00	10.79
ATOM	4075	CA	ASP	H	104	54.164	25.211	18.355	1.00	9.67
ATOM	4076	C	ASP	H	104	54.236	25.257	19.861	1.00	12.71
ATOM	4077	O	ASP	H	104	54.059	24.229	20.525	1.00	15.06
ATOM	4078	CB	ASP	H	104	52.705	25.170	17.967	1.00	10.37

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ATOM	4079	CG	ASP	H	104	52.035	23.870	18.382	1.00	12.59
ATOM	4080	OD1	ASP	H	104	51.219	23.890	19.311	1.00	12.60
ATOM	4081	OD2	ASP	H	104	52.314	22.799	17.798	1.00	17.96
ATOM	4082	N	MET	H	105	54.509	26.429	20.413	1.00	11.83
ATOM	4083	CA	MET	H	105	54.551	26.567	21.870	1.00	11.87
ATOM	4084	C	MET	H	105	53.174	27.164	22.250	1.00	8.41
ATOM	4085	O	MET	H	105	52.996	28.406	22.240	1.00	4.53
ATOM	4086	CB	MET	H	105	55.703	27.490	22.267	1.00	12.71
ATOM	4087	CG	MET	H	105	56.636	27.864	21.147	1.00	2.00
ATOM	4088	SD	MET	H	105	58.247	28.196	21.850	1.00	2.00
ATOM	4089	CE	MET	H	105	57.971	29.437	22.988	1.00	3.61
ATOM	4090	N	ASP	H	106	52.230	26.270	22.602	1.00	6.59
ATOM	4091	CA	ASP	H	106	50.822	26.654	22.869	1.00	8.38
ATOM	4092	C	ASP	H	106	50.274	27.207	24.189	1.00	6.59
ATOM	4093	O	ASP	H	106	49.100	27.545	24.227	1.00	3.39
ATOM	4094	CB	ASP	H	106	49.859	25.560	22.409	1.00	2.00
ATOM	4095	CG	ASP	H	106	49.893	24.384	23.290	1.00	2.00
ATOM	4096	OD1	ASP	H	106	50.425	24.497	24.423	1.00	2.00
ATOM	4097	OD2	ASP	H	106	49.399	23.340	22.846	1.00	2.00
ATOM	4098	N	SER	H	107	51.075	27.348	25.244	1.00	7.89
ATOM	4099	CA	SER	H	107	50.562	27.978	26.482	1.00	14.18
ATOM	4100	C	SER	H	107	51.681	28.024	27.283	1.00	14.81
ATOM	4101	O	SER	H	107	52.718	28.014	27.496	1.00	24.80
ATOM	4102	CB	SER	H	107	49.852	26.978	27.365	1.00	14.59
ATOM	4103	OG	SER	H	107	48.982	26.210	26.582	1.00	26.72
ATOM	4104	N	TRP	H	108	51.488	29.833	27.778	1.00	10.64
ATOM	4105	CA	TRP	H	108	52.585	30.470	28.496	1.00	10.67
ATOM	4106	C	TRP	H	108	52.281	30.945	29.901	1.00	11.97
ATOM	4107	O	TRP	H	108	51.178	31.378	30.192	1.00	22.87
ATOM	4108	CB	TRP	H	108	53.060	31.673	27.704	1.00	10.90
ATOM	4109	CG	TRP	H	108	53.476	31.383	26.290	1.00	9.87
ATOM	4110	CD1	TRP	H	108	52.826	30.612	25.364	1.00	8.33
ATOM	4111	CD2	TRP	H	108	54.671	31.843	25.658	1.00	11.24
ATOM	4112	NE1	TRP	H	108	53.549	30.565	24.201	1.00	8.41
ATOM	4113	CE2	TRP	H	108	54.689	31.307	24.362	1.00	9.53
ATOM	4114	CE3	TRP	H	108	55.737	32.656	26.071	1.00	11.51
ATOM	4115	CZ2	TRP	H	108	55.719	31.553	23.478	1.00	9.07
ATOM	4116	CZ3	TRP	H	108	56.764	32.899	25.182	1.00	8.57
ATOM	4117	CH2	TRP	H	108	56.748	32.349	23.902	1.00	7.48
ATOM	4118	N	GLY	H	109	53.263	30.902	30.780	1.00	8.25
ATOM	4119	CA	GLY	H	109	53.034	31.391	32.118	1.00	6.31
ATOM	4120	C	GLY	H	109	52.949	32.896	31.969	1.00	6.22
ATOM	4121	O	GLY	H	109	53.125	33.392	30.845	1.00	2.00
ATOM	4122	N	GLN	H	110	52.642	33.598	33.074	1.00	8.33
ATOM	4123	CA	GLN	H	110	52.551	35.066	33.088	1.00	9.90
ATOM	4124	C	GLN	H	110	53.842	35.674	32.616	1.00	10.53
ATOM	4125	O	GLN	H	110	53.843	36.685	31.899	1.00	10.46
ATOM	4126	CB	GLN	H	110	52.313	35.611	34.494	1.00	3.46
ATOM	4127	CG	GLN	H	110	51.541	34.701	35.353	1.00	13.07
ATOM	4128	CD	GLN	H	110	52.395	33.947	36.310	1.00	15.22
ATOM	4129	OE1	GLN	H	110	53.223	34.525	37.014	1.00	17.43
ATOM	4130	NE2	GLN	H	110	52.183	32.637	36.376	1.00	21.28
ATOM	4131	N	GLY	H	111	54.936	35.056	33.070	1.00	10.47
ATOM	4132	CA	GLY	H	111	56.280	35.518	32.763	1.00	15.47
ATOM	4133	C	GLY	H	111	56.932	35.958	34.070	1.00	19.09
ATOM	4134	O	GLY	H	111	56.239	36.306	35.028	1.00	23.70
ATOM	4135	N	THR	H	112	58.254	35.947	34.150	1.00	15.72
ATOM	4136	CA	THR	H	112	58.861	36.351	35.386	1.00	14.74
ATOM	4137	C	THR	H	112	59.880	37.362	35.056	1.00	15.34
ATOM	4138	O	THR	H	112	60.717	37.156	34.194	1.00	14.21

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ATOM	4139	CB	THR	H	112	59.524	35.181	36.130	1.00	18.65
ATOM	4140	OG1	THR	H	112	58.523	34.196	36.456	1.00	27.23
ATOM	4141	CG2	THR	H	112	60.210	35.685	37.422	1.00	11.52
ATOM	4142	N	LEU	H	113	59.801	38.469	35.762	1.00	18.61
ATOM	4143	CA	LEU	H	113	60.729	39.548	35.547	1.00	21.08
ATOM	4144	C	LEU	H	113	61.937	39.353	36.443	1.00	23.01
ATOM	4145	O	LEU	H	113	61.872	39.555	37.664	1.00	30.63
ATOM	4146	CB	LEU	H	113	60.055	40.873	35.892	1.00	21.74
ATOM	4147	CG	LEU	H	113	60.557	42.182	35.281	1.00	21.09
ATOM	4148	CD1	LEU	H	113	61.573	42.847	36.205	1.00	22.47
ATOM	4149	CD2	LEU	H	113	61.158	41.901	33.941	1.00	24.66
ATOM	4150	N	VAL	H	114	63.045	38.951	35.854	1.00	21.01
ATOM	4151	CA	VAL	H	114	64.252	38.793	36.651	1.00	21.98
ATOM	4152	C	VAL	H	114	65.092	40.043	36.342	1.00	21.04
ATOM	4153	O	VAL	H	114	65.524	40.282	35.211	1.00	21.38
ATOM	4154	CB	VAL	H	114	65.014	37.476	36.299	1.00	21.29
ATOM	4155	CG1	VAL	H	114	66.516	37.676	36.473	1.00	20.35
ATOM	4156	CG2	VAL	H	114	64.519	36.326	37.190	1.00	18.68
ATOM	4157	N	THR	H	115	65.284	40.882	37.336	1.00	19.54
ATOM	4158	CA	THR	H	115	66.048	42.093	37.096	1.00	21.61
ATOM	4159	C	THR	H	115	67.248	42.043	37.981	1.00	23.48
ATOM	4160	O	THR	H	115	67.122	42.085	39.198	1.00	24.68
ATOM	4161	CB	THR	H	115	65.219	43.345	37.434	1.00	23.27
ATOM	4162	OG1	THR	H	115	66.065	44.348	38.027	1.00	13.32
ATOM	4163	CG2	THR	H	115	64.046	42.950	38.401	1.00	27.02
ATOM	4164	N	VAL	H	116	68.420	41.988	37.369	1.00	27.45
ATOM	4165	CA	VAL	H	116	69.645	41.885	38.136	1.00	30.42
ATOM	4166	C	VAL	H	116	70.481	43.145	38.075	1.00	32.51
ATOM	4167	O	VAL	H	116	71.039	43.489	37.020	1.00	29.68
ATOM	4168	CB	VAL	H	116	70.474	40.702	37.634	1.00	32.55
ATOM	4169	CG1	VAL	H	116	69.561	39.432	37.511	1.00	30.53
ATOM	4170	CG2	VAL	H	116	71.096	41.057	36.281	1.00	29.66
ATOM	4171	N	SER	H	117	70.551	43.821	39.225	1.00	37.28
ATOM	4172	CA	SER	H	117	71.314	45.063	39.380	1.00	42.40
ATOM	4173	C	SER	H	117	71.951	45.230	40.766	1.00	46.52
ATOM	4174	O	SER	H	117	71.499	44.652	41.773	1.00	45.43
ATOM	4175	CB	SER	H	117	70.434	46.283	39.121	1.00	42.92
ATOM	4176	OG	SER	H	117	70.281	47.037	40.312	1.00	38.03
ATOM	4177	N	SER	H	118	73.007	46.038	40.796	1.00	47.83
ATOM	4178	CA	SER	H	118	73.744	46.314	42.020	1.00	48.69
ATOM	4179	C	SER	H	118	73.002	47.331	42.869	1.00	50.17
ATOM	4180	O	SER	H	118	73.102	47.346	44.099	1.00	52.65
ATOM	4181	CB	SER	H	118	75.127	46.845	41.662	1.00	45.84
ATOM	4182	OG	SER	H	118	75.225	47.052	40.262	1.00	49.59
ATOM	4183	N	ALA	H	119	72.250	48.188	42.196	1.00	51.62
ATOM	4184	CA	ALA	H	119	71.488	49.223	42.879	1.00	52.05
ATOM	4185	C	ALA	H	119	70.727	48.618	44.026	1.00	51.09
ATOM	4186	O	ALA	H	119	70.596	47.401	44.112	1.00	53.93
ATOM	4187	CB	ALA	H	119	70.509	49.877	41.910	1.00	56.98
ATOM	4188	N	SER	H	120	70.202	49.468	44.895	1.00	50.34
ATOM	4189	CA	SER	H	120	69.434	48.983	46.030	1.00	51.08
ATOM	4190	C	SER	H	120	68.248	49.868	46.254	1.00	48.22
ATOM	4191	O	SER	H	120	68.370	51.087	46.180	1.00	44.34
ATOM	4192	CB	SER	H	120	70.289	48.955	47.281	1.00	56.08
ATOM	4193	OG	SER	H	120	71.565	48.431	46.962	1.00	67.62
ATOM	4194	N	THR	H	121	67.107	49.232	46.519	1.00	48.94
ATOM	4195	CA	THR	H	121	65.836	49.918	46.738	1.00	47.95
ATOM	4196	C	THR	H	121	66.059	51.352	47.145	1.00	48.67
ATOM	4197	O	THR	H	121	67.015	51.653	47.871	1.00	52.27
ATOM	4198	CB	THR	H	121	64.997	49.232	47.819	1.00	46.84

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ATOM	4199	OG1	THR	H	121	64.371	48.064	47.256	1.00	51.63
ATOM	4200	CG2	THR	H	121	63.938	50.220	48.371	1.00	44.57
ATOM	4201	N	LYS	H	122	65.189	52.237	46.663	1.00	45.53
ATOM	4202	CA	LYS	H	122	65.316	53.643	46.974	1.00	42.91
ATOM	4203	C	LYS	H	122	64.138	54.353	46.373	1.00	44.67
ATOM	4204	O	LYS	H	122	63.678	53.992	45.286	1.00	46.29
ATOM	4205	CB	LYS	H	122	66.620	54.182	46.374	1.00	38.32
ATOM	4206	CG	LYS	H	122	66.476	55.391	45.499	1.00	39.69
ATOM	4207	CD	LYS	H	122	67.555	56.391	45.818	1.00	42.78
ATOM	4208	CE	LYS	H	122	67.064	57.399	46.805	1.00	46.98
ATOM	4209	NZ	LYS	H	122	65.912	58.206	46.296	1.00	45.85
ATOM	4210	N	GLY	H	123	63.654	55.364	47.087	1.00	45.45
ATOM	4211	CA	GLY	H	123	62.546	56.156	46.594	1.00	45.78
ATOM	4212	C	GLY	H	123	62.993	57.066	45.451	1.00	47.24
ATOM	4213	O	GLY	H	123	64.193	57.260	45.220	1.00	43.22
ATOM	4214	N	PRO	H	124	62.050	57.636	44.688	1.00	49.04
ATOM	4215	CA	PRO	H	124	62.488	58.508	43.599	1.00	50.42
ATOM	4216	C	PRO	H	124	62.637	59.930	44.100	1.00	49.92
ATOM	4217	O	PRO	H	124	62.486	60.202	45.287	1.00	51.17
ATOM	4218	CB	PRO	H	124	61.357	58.409	42.588	1.00	50.28
ATOM	4219	CG	PRO	H	124	60.133	58.283	43.473	1.00	50.04
ATOM	4220	CD	PRO	H	124	60.582	57.526	44.733	1.00	49.13
ATOM	4221	N	SER	H	125	62.939	60.821	43.165	1.00	48.69
ATOM	4222	CA	SER	H	125	63.083	62.241	43.420	1.00	43.43
ATOM	4223	C	SER	H	125	62.059	62.786	42.444	1.00	38.72
ATOM	4224	O	SER	H	125	61.841	62.231	41.364	1.00	38.11
ATOM	4225	CB	SER	H	125	64.487	62.729	43.047	1.00	47.11
ATOM	4226	OG	SER	H	125	65.442	62.420	44.053	1.00	49.11
ATOM	4227	N	VAL	H	126	61.396	63.853	42.837	1.00	34.23
ATOM	4228	CA	VAL	H	126	60.370	64.423	41.992	1.00	31.13
ATOM	4229	C	VAL	H	126	60.721	65.853	41.700	1.00	30.78
ATOM	4230	O	VAL	H	126	61.170	66.562	42.585	1.00	35.06
ATOM	4231	CB	VAL	H	126	59.007	64.383	42.706	1.00	27.87
ATOM	4232	CG1	VAL	H	126	58.552	62.937	42.915	1.00	23.14
ATOM	4233	CG2	VAL	H	126	59.120	65.084	44.044	1.00	28.58
ATOM	4234	N	PHE	H	127	60.498	66.295	40.473	1.00	30.56
ATOM	4235	CA	PHE	H	127	60.821	67.670	40.129	1.00	32.97
ATOM	4236	C	PHE	H	127	59.759	68.315	39.252	1.00	34.78
ATOM	4237	O	PHE	H	127	59.327	67.767	38.236	1.00	37.46
ATOM	4238	CB	PHE	H	127	62.194	67.700	39.501	1.00	28.87
ATOM	4239	CG	PHE	H	127	63.240	67.140	40.399	1.00	25.22
ATOM	4240	CD1	PHE	H	127	63.721	67.872	41.480	1.00	24.02
ATOM	4241	CD2	PHE	H	127	63.725	65.866	40.193	1.00	22.87
ATOM	4242	CE1	PHE	H	127	64.689	67.316	42.335	1.00	25.74
ATOM	4243	CE2	PHE	H	127	64.677	65.321	41.040	1.00	19.70
ATOM	4244	CZ	PHE	H	127	65.160	66.041	42.103	1.00	19.75
ATOM	4245	N	PRO	H	128	59.320	69.507	39.634	1.00	34.23
ATOM	4246	CA	PRO	H	128	58.298	70.044	38.762	1.00	35.13
ATOM	4247	C	PRO	H	128	58.900	70.309	37.449	1.00	34.53
ATOM	4248	O	PRO	H	128	60.083	70.632	37.377	1.00	34.17
ATOM	4249	CB	PRO	H	128	57.886	71.334	39.443	1.00	37.58
ATOM	4250	CG	PRO	H	128	59.083	71.737	40.183	1.00	36.73
ATOM	4251	CD	PRO	H	128	59.661	70.445	40.704	1.00	35.92
ATOM	4252	N	LEU	H	129	58.083	70.105	36.425	1.00	33.61
ATOM	4253	CA	LEU	H	129	58.438	70.399	35.053	1.00	36.05
ATOM	4254	C	LEU	H	129	57.347	71.427	34.894	1.00	39.89
ATOM	4255	O	LEU	H	129	56.300	71.153	34.309	1.00	42.26
ATOM	4256	CB	LEU	H	129	58.187	69.213	34.125	1.00	32.62
ATOM	4257	CG	LEU	H	129	58.740	67.839	34.525	1.00	31.98
ATOM	4258	CD1	LEU	H	129	58.029	66.732	33.706	1.00	29.93

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ATOM	4259	CD2	LEU	H	129	60.230	67.787	34.311	1.00	25.75
ATOM	4260	N	ALA	H	130	57.597	72.607	35.462	1.00	44.29
ATOM	4261	CA	ALA	H	130	56.624	73.704	35.467	1.00	46.33
ATOM	4262	C	ALA	H	130	56.363	74.462	34.169	1.00	46.24
ATOM	4263	O	ALA	H	130	57.278	74.753	33.382	1.00	47.97
ATOM	4264	CB	ALA	H	130	56.981	74.709	36.561	1.00	45.39
ATOM	4265	N	PRO	H	131	55.087	74.805	33.941	1.00	43.55
ATOM	4266	CA	PRO	H	131	54.688	75.537	32.745	1.00	40.77
ATOM	4267	C	PRO	H	131	55.471	76.839	32.674	1.00	40.25
ATOM	4268	O	PRO	H	131	55.932	77.381	33.685	1.00	40.73
ATOM	4269	CB	PRO	H	131	53.180	75.754	32.936	1.00	37.52
ATOM	4270	CG	PRO	H	131	52.946	75.524	34.369	1.00	40.50
ATOM	4271	CD	PRO	H	131	53.937	74.513	34.810	1.00	41.32
ATOM	4272	N	SER	H	132	55.636	77.317	31.458	1.00	40.42
ATOM	4273	CA	SER	H	132	56.351	78.548	31.215	1.00	43.10
ATOM	4274	C	SER	H	132	56.113	78.856	29.750	1.00	44.69
ATOM	4275	O	SER	H	132	55.679	77.982	29.004	1.00	45.34
ATOM	4276	CB	SER	H	132	57.832	78.334	31.447	1.00	42.95
ATOM	4277	OG	SER	H	132	58.398	77.840	30.255	1.00	44.71
ATOM	4278	N	SER	H	133	56.380	80.089	29.340	1.00	46.64
ATOM	4279	CA	SER	H	133	56.195	80.475	27.944	1.00	49.02
ATOM	4280	C	SER	H	133	56.861	79.409	27.091	1.00	48.65
ATOM	4281	O	SER	H	133	56.388	79.061	26.006	1.00	48.90
ATOM	4282	CB	SER	H	133	56.868	81.824	27.679	1.00	53.52
ATOM	4283	OG	SER	H	133	57.796	82.121	28.716	1.00	63.26
ATOM	4284	N	LYS	H	134	57.963	78.883	27.612	1.00	47.30
ATOM	4285	CA	LYS	H	134	58.739	77.872	26.922	1.00	48.44
ATOM	4286	C	LYS	H	134	58.048	76.516	26.851	1.00	48.61
ATOM	4287	O	LYS	H	134	58.563	75.574	26.237	1.00	49.68
ATOM	4288	CB	LYS	H	134	60.081	77.734	27.611	1.00	51.35
ATOM	4289	CG	LYS	H	134	60.450	78.955	28.477	1.00	59.47
ATOM	4290	CD	LYS	H	134	61.094	78.548	29.841	1.00	62.39
ATOM	4291	CE	LYS	H	134	61.038	79.669	30.888	1.00	60.24
ATOM	4292	NZ	LYS	H	134	59.987	80.697	30.606	1.00	58.81
ATOM	4293	N	SER	H	135	56.883	76.424	27.483	1.00	47.59
ATOM	4294	CA	SER	H	135	56.091	75.197	27.481	1.00	47.32
ATOM	4295	C	SER	H	135	54.610	75.495	27.265	1.00	42.54
ATOM	4296	O	SER	H	135	53.750	74.800	27.793	1.00	42.85
ATOM	4297	CB	SER	H	135	56.281	74.406	28.791	1.00	49.88
ATOM	4298	OG	SER	H	135	55.463	74.896	29.845	1.00	49.29
ATOM	4299	N	THR	H	136	54.320	76.509	26.464	1.00	38.25
ATOM	4300	CA	THR	H	136	52.943	76.892	26.211	1.00	38.67
ATOM	4301	C	THR	H	136	52.605	77.125	24.737	1.00	39.13
ATOM	4302	O	THR	H	136	52.470	78.270	24.266	1.00	38.04
ATOM	4303	CB	THR	H	136	52.594	78.157	27.003	1.00	39.27
ATOM	4304	OG1	THR	H	136	52.747	77.898	28.404	1.00	39.36
ATOM	4305	CG2	THR	H	136	51.159	78.582	26.724	1.00	42.81
ATOM	4306	N	SER	H	137	52.462	76.031	24.007	1.00	38.15
ATOM	4307	CA	SER	H	137	52.112	76.135	22.611	1.00	37.95
ATOM	4308	C	SER	H	137	50.646	76.540	22.518	1.00	38.29
ATOM	4309	O	SER	H	137	49.797	76.006	23.220	1.00	39.72
ATOM	4310	CB	SER	H	137	52.346	74.795	21.930	1.00	38.29
ATOM	4311	OG	SER	H	137	53.740	74.562	21.840	1.00	39.76
ATOM	4312	N	GLY	H	138	50.342	77.507	21.668	1.00	41.65
ATOM	4313	CA	GLY	H	138	48.961	77.949	21.526	1.00	41.71
ATOM	4314	C	GLY	H	138	48.269	78.232	22.850	1.00	43.93
ATOM	4315	O	GLY	H	138	48.898	78.632	23.834	1.00	44.44
ATOM	4316	N	GLY	H	139	46.958	78.023	22.880	1.00	45.84
ATOM	4317	CA	GLY	H	139	46.216	78.259	24.099	1.00	46.19
ATOM	4318	C	GLY	H	139	46.519	77.233	25.183	1.00	46.74

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ATOM	4319	O	GLY H 139	46.060	77.391	26.319	1.00	50.88
ATOM	4320	N	THR H 140	47.308	76.205	24.861	1.00	40.88
ATOM	4321	CA	THR H 140	47.621	75.152	25.830	1.00	35.31
ATOM	4322	C	THR H 140	49.001	75.142	26.487	1.00	32.19
ATOM	4323	O	THR H 140	50.009	75.453	25.882	1.00	30.78
ATOM	4324	CB	THR H 140	47.473	73.803	25.205	1.00	35.27
ATOM	4325	OG1	THR H 140	48.747	73.148	25.232	1.00	32.31
ATOM	4326	CG2	THR H 140	47.027	73.939	23.769	1.00	36.22
ATOM	4327	N	ALA H 141	49.043	74.722	27.735	1.00	31.37
ATOM	4328	CA	ALA H 141	50.298	74.675	28.459	1.00	32.08
ATOM	4329	C	ALA H 141	50.667	73.233	28.848	1.00	32.24
ATOM	4330	O	ALA H 141	49.811	72.401	29.161	1.00	36.52
ATOM	4331	CB	ALA H 141	50.192	75.575	29.710	1.00	34.57
ATOM	4332	N	ALA H 142	51.947	72.923	28.830	1.00	27.82
ATOM	4333	CA	ALA H 142	52.350	71.578	29.180	1.00	22.66
ATOM	4334	C	ALA H 142	52.984	71.659	30.535	1.00	20.65
ATOM	4335	O	ALA H 142	53.602	72.665	30.859	1.00	25.04
ATOM	4336	CB	ALA H 142	53.345	71.075	28.168	1.00	26.95
ATOM	4337	N	LEU H 143	52.833	70.621	31.338	1.00	14.14
ATOM	4338	CA	LEU H 143	53.444	70.630	32.654	1.00	18.30
ATOM	4339	C	LEU H 143	53.411	69.219	33.214	1.00	21.54
ATOM	4340	O	LEU H 143	52.551	68.426	32.824	1.00	19.22
ATOM	4341	CB	LEU H 143	52.729	71.653	33.592	1.00	20.54
ATOM	4342	CG	LEU H 143	51.723	71.440	34.775	1.00	22.85
ATOM	4343	CD1	LEU H 143	50.347	71.889	34.365	1.00	15.44
ATOM	4344	CD2	LEU H 143	51.606	69.978	35.224	1.00	29.59
ATOM	4345	N	GLY H 144	54.329	68.913	34.139	1.00	24.94
ATOM	4346	CA	GLY H 144	54.377	67.579	34.724	1.00	27.73
ATOM	4347	C	GLY H 144	55.516	67.343	35.713	1.00	30.97
ATOM	4348	O	GLY H 144	56.313	68.250	36.010	1.00	34.73
ATOM	4349	N	CYS H 145	55.598	66.125	36.243	1.00	28.93
ATOM	4350	CA	CYS H 145	56.658	65.792	37.188	1.00	27.84
ATOM	4351	C	CYS H 145	57.776	64.865	36.704	1.00	25.82
ATOM	4352	O	CYS H 145	57.562	63.923	35.927	1.00	26.40
ATOM	4353	CB	CYS H 145	56.048	65.188	38.430	1.00	30.17
ATOM	4354	SG	CYS H 145	55.062	66.358	39.390	1.00	38.46
ATOM	4355	N	LEU H 146	58.982	65.139	37.186	1.00	22.56
ATOM	4356	CA	LEU H 146	60.124	64.316	36.830	1.00	22.80
ATOM	4357	C	LEU H 146	60.465	63.471	38.037	1.00	24.65
ATOM	4358	O	LEU H 146	61.024	63.953	39.016	1.00	24.83
ATOM	4359	CB	LEU H 146	61.348	65.152	36.432	1.00	17.66
ATOM	4360	CG	LEU H 146	62.673	64.377	36.411	1.00	7.54
ATOM	4361	CD1	LEU H 146	62.465	62.994	35.869	1.00	4.46
ATOM	4362	CD2	LEU H 146	63.659	65.087	35.518	1.00	14.61
ATOM	4363	N	VAL H 147	60.135	62.192	37.938	1.00	26.94
ATOM	4364	CA	VAL H 147	60.390	61.235	39.006	1.00	26.97
ATOM	4365	C	VAL H 147	61.784	60.578	38.794	1.00	32.34
ATOM	4366	O	VAL H 147	61.933	59.538	38.129	1.00	32.62
ATOM	4367	CB	VAL H 147	59.251	60.201	38.996	1.00	26.76
ATOM	4368	CG1	VAL H 147	59.324	59.286	40.222	1.00	27.87
ATOM	4369	CG2	VAL H 147	57.922	60.930	38.940	1.00	16.07
ATOM	4370	N	LYS H 148	62.808	61.210	39.361	1.00	36.73
ATOM	4371	CA	LYS H 148	64.187	60.760	39.214	1.00	40.79
ATOM	4372	C	LYS H 148	64.799	59.776	40.219	1.00	44.36
ATOM	4373	O	LYS H 148	64.455	59.773	41.398	1.00	44.75
ATOM	4374	CB	LYS H 148	65.084	61.986	39.122	1.00	37.72
ATOM	4375	CG	LYS H 148	65.661	62.180	37.734	1.00	45.08
ATOM	4376	CD	LYS H 148	66.955	61.388	37.537	1.00	44.32
ATOM	4377	CE	LYS H 148	68.126	62.348	37.463	1.00	46.70
ATOM	4378	NZ	LYS H 148	68.720	62.575	38.815	1.00	45.08

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ATOM	4379	N	ASP	H	149	65.732	58.961	39.717	1.00	47.86
ATOM	4380	CA	ASP	H	149	66.485	57.949	40.479	1.00	46.65
ATOM	4381	C	ASP	H	149	65.796	57.209	41.611	1.00	48.79
ATOM	4382	O	ASP	H	149	65.767	57.666	42.755	1.00	50.03
ATOM	4383	CB	ASP	H	149	67.759	58.582	41.003	1.00	44.69
ATOM	4384	CG	ASP	H	149	68.233	59.715	40.111	1.00	48.72
ATOM	4385	OD1	ASP	H	149	68.434	59.470	38.902	1.00	52.72
ATOM	4386	OD2	ASP	H	149	68.394	60.853	40.597	1.00	47.28
ATOM	4387	N	TYR	H	150	65.231	56.062	41.273	1.00	48.58
ATOM	4388	CA	TYR	H	150	64.572	55.226	42.253	1.00	48.92
ATOM	4389	C	TYR	H	150	64.851	53.829	41.750	1.00	49.77
ATOM	4390	O	TYR	H	150	65.353	53.669	40.632	1.00	52.37
ATOM	4391	CB	TYR	H	150	63.070	55.497	42.281	1.00	50.43
ATOM	4392	CG	TYR	H	150	62.375	55.283	40.948	1.00	55.99
ATOM	4393	CD1	TYR	H	150	61.319	54.371	40.835	1.00	55.30
ATOM	4394	CD2	TYR	H	150	62.770	55.999	39.798	1.00	55.47
ATOM	4395	CE1	TYR	H	150	60.675	54.174	39.618	1.00	57.64
ATOM	4396	CE2	TYR	H	150	62.128	55.811	38.567	1.00	54.43
ATOM	4397	CZ	TYR	H	150	61.082	54.894	38.484	1.00	56.31
ATOM	4398	OH	TYR	H	150	60.441	54.677	37.281	1.00	53.90
ATOM	4399	N	PHE	H	151	64.493	52.823	42.544	1.00	49.25
ATOM	4400	CA	PHE	H	151	64.745	51.431	42.179	1.00	46.95
ATOM	4401	C	PHE	H	151	64.068	50.465	43.140	1.00	44.06
ATOM	4402	O	PHE	H	151	64.117	50.662	44.340	1.00	43.34
ATOM	4403	CB	PHE	H	151	66.249	51.187	42.184	1.00	45.37
ATOM	4404	CG	PHE	H	151	66.643	49.800	41.811	1.00	45.19
ATOM	4405	CD1	PHE	H	151	66.203	48.705	42.557	1.00	44.43
ATOM	4406	CD2	PHE	H	151	67.521	49.591	40.756	1.00	46.93
ATOM	4407	CE1	PHE	H	151	66.636	47.414	42.266	1.00	45.47
ATOM	4408	CE2	PHE	H	151	67.968	48.315	40.448	1.00	48.24
ATOM	4409	CZ	PHE	H	151	67.526	47.214	41.209	1.00	48.41
ATOM	4410	N	PRO	H	152	63.412	49.409	42.625	1.00	42.92
ATOM	4411	CA	PRO	H	152	63.221	48.996	41.228	1.00	44.49
ATOM	4412	C	PRO	H	152	61.889	49.538	40.766	1.00	44.25
ATOM	4413	O	PRO	H	152	61.204	50.216	41.530	1.00	46.46
ATOM	4414	CB	PRO	H	152	63.149	47.492	41.329	1.00	45.87
ATOM	4415	CG	PRO	H	152	62.342	47.315	42.595	1.00	43.03
ATOM	4416	CD	PRO	H	152	62.786	48.440	43.537	1.00	40.62
ATOM	4417	N	GLU	H	153	61.493	49.222	39.538	1.00	43.87
ATOM	4418	CA	GLU	H	153	60.196	49.712	39.075	1.00	40.51
ATOM	4419	C	GLU	H	153	59.233	49.017	40.036	1.00	36.12
ATOM	4420	O	GLU	H	153	59.633	48.130	40.792	1.00	38.59
ATOM	4421	CB	GLU	H	153	59.920	49.270	37.624	1.00	42.13
ATOM	4422	CG	GLU	H	153	60.656	50.069	36.559	1.00	48.08
ATOM	4423	CD	GLU	H	153	59.715	50.856	35.630	1.00	56.10
ATOM	4424	OE1	GLU	H	153	59.826	50.686	34.394	1.00	60.33
ATOM	4425	OE2	GLU	H	153	58.870	51.655	36.110	1.00	55.43
ATOM	4426	N	PRO	H	154	57.981	49.452	40.083	1.00	30.98
ATOM	4427	CA	PRO	H	154	57.380	50.537	39.330	1.00	31.32
ATOM	4428	C	PRO	H	154	57.106	51.701	40.251	1.00	36.64
ATOM	4429	O	PRO	H	154	56.971	51.518	41.473	1.00	40.24
ATOM	4430	CB	PRO	H	154	56.090	49.935	38.858	1.00	29.87
ATOM	4431	CG	PRO	H	154	55.726	48.940	39.975	1.00	29.62
ATOM	4432	CD	PRO	H	154	56.950	48.687	40.798	1.00	30.55
ATOM	4433	N	VAL	H	155	57.043	52.896	39.673	1.00	37.91
ATOM	4434	CA	VAL	H	155	56.736	54.088	40.442	1.00	38.95
ATOM	4435	C	VAL	H	155	55.461	54.517	39.811	1.00	39.77
ATOM	4436	O	VAL	H	155	55.459	54.916	38.651	1.00	44.60
ATOM	4437	CB	VAL	H	155	57.716	55.222	40.210	1.00	41.84
ATOM	4438	CG1	VAL	H	155	58.024	55.347	38.726	1.00	48.65



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ATOM	4439	CG2	VAL	H	155	57.086	56.529	40.679	1.00	47.30
ATOM	4440	N	THR	H	156	54.364	54.413	40.536	1.00	39.94
ATOM	4441	CA	THR	H	156	53.109	54.821	39.945	1.00	40.14
ATOM	4442	C	THR	H	156	52.970	56.323	40.125	1.00	37.73
ATOM	4443	O	THR	H	156	53.412	56.884	41.126	1.00	33.80
ATOM	4444	CB	THR	H	156	51.940	54.052	40.574	1.00	43.10
ATOM	4445	OG1	THR	H	156	50.705	54.468	39.968	1.00	48.00
ATOM	4446	CG2	THR	H	156	51.934	54.247	42.099	1.00	41.34
ATOM	4447	N	VAL	H	157	52.394	56.974	39.123	1.00	38.39
ATOM	4448	CA	VAL	H	157	52.220	58.421	39.160	1.00	41.85
ATOM	4449	C	VAL	H	157	50.805	58.830	38.811	1.00	43.90
ATOM	4450	O	VAL	H	157	50.285	58.424	37.767	1.00	46.23
ATOM	4451	CB	VAL	H	157	53.133	59.118	38.147	1.00	44.03
ATOM	4452	CG1	VAL	H	157	52.883	60.634	38.180	1.00	40.18
ATOM	4453	CG2	VAL	H	157	54.596	58.748	38.426	1.00	45.88
ATOM	4454	N	SER	H	158	50.190	59.640	39.670	1.00	45.43
ATOM	4455	CA	SER	H	158	48.837	60.109	39.413	1.00	45.93
ATOM	4456	C	SER	H	158	48.716	61.602	39.622	1.00	44.86
ATOM	4457	O	SER	H	158	49.474	62.192	40.394	1.00	42.96
ATOM	4458	CB	SER	H	158	47.837	59.420	40.319	1.00	46.06
ATOM	4459	OG	SER	H	158	46.921	60.386	40.799	1.00	49.05
ATOM	4460	N	TRP	H	159	47.736	62.195	38.945	1.00	44.04
ATOM	4461	CA	TRP	H	159	47.486	63.629	39.046	1.00	44.77
ATOM	4462	C	TRP	H	159	46.215	64.018	39.804	1.00	47.34
ATOM	4463	O	TRP	H	159	45.135	63.408	39.644	1.00	46.26
ATOM	4464	CB	TRP	H	159	47.441	64.237	37.662	1.00	42.37
ATOM	4465	CG	TRP	H	159	48.755	64.262	37.082	1.00	40.11
ATOM	4466	CD1	TRP	H	159	49.319	63.304	36.319	1.00	35.77
ATOM	4467	CD2	TRP	H	159	49.705	65.323	37.184	1.00	40.35
ATOM	4468	NE1	TRP	H	159	50.566	63.702	35.927	1.00	39.48
ATOM	4469	CE2	TRP	H	159	50.828	64.938	36.445	1.00	38.52
ATOM	4470	CE3	TRP	H	159	49.707	66.563	37.830	1.00	41.15
ATOM	4471	CZ2	TRP	H	159	51.959	65.751	36.328	1.00	43.04
ATOM	4472	CZ3	TRP	H	159	50.832	67.375	37.710	1.00	42.87
ATOM	4473	CH2	TRP	H	159	51.942	66.964	36.964	1.00	44.26
ATOM	4474	N	ASN	H	160	46.350	65.081	40.598	1.00	48.42
ATOM	4475	CA	ASN	H	160	45.256	65.581	41.426	1.00	48.97
ATOM	4476	C	ASN	H	160	44.481	64.377	41.935	1.00	51.35
ATOM	4477	O	ASN	H	160	43.294	64.178	41.635	1.00	49.63
ATOM	4478	CB	ASN	H	160	44.362	66.490	40.605	1.00	45.16
ATOM	4479	CG	ASN	H	160	44.993	67.846	40.348	1.00	42.58
ATOM	4480	OD1	ASN	H	160	46.045	68.189	40.912	1.00	36.48
ATOM	4481	ND2	ASN	H	160	44.354	68.629	39.479	1.00	42.64
ATOM	4482	N	SER	H	161	45.211	63.550	42.672	1.00	53.42
ATOM	4483	CA	SER	H	161	44.666	62.339	43.245	1.00	54.13
ATOM	4484	C	SER	H	161	43.469	61.857	42.443	1.00	54.04
ATOM	4485	O	SER	H	161	42.338	61.901	42.926	1.00	54.97
ATOM	4486	CB	SER	H	161	44.278	62.571	44.709	1.00	53.09
ATOM	4487	OG	SER	H	161	45.090	63.586	45.280	1.00	56.86
ATOM	4488	N	GLY	H	162	43.726	61.462	41.196	1.00	53.55
ATOM	4489	CA	GLY	H	162	42.684	60.907	40.352	1.00	51.76
ATOM	4490	C	GLY	H	162	41.915	61.831	39.450	1.00	51.28
ATOM	4491	O	GLY	H	162	41.870	61.605	38.251	1.00	52.04
ATOM	4492	N	ALA	H	163	41.296	62.856	40.025	1.00	52.59
ATOM	4493	CA	ALA	H	163	40.491	63.802	39.256	1.00	52.95
ATOM	4494	C	ALA	H	163	41.076	64.120	37.897	1.00	53.49
ATOM	4495	O	ALA	H	163	40.354	64.121	36.893	1.00	56.32
ATOM	4496	CB	ALA	H	163	40.295	65.088	40.032	1.00	53.34
ATOM	4497	N	LEU	H	164	42.379	64.407	37.866	1.00	50.28
ATOM	4498	CA	LEU	H	164	43.042	64.728	36.614	1.00	45.33

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ATOM	4499	C	LEU	H	164	43.566	63.477	35.900	1.00	43.24
ATOM	4500	O	LEU	H	164	44.549	62.860	36.314	1.00	37.30
ATOM	4501	CB	LEU	H	164	44.173	65.738	36.854	1.00	41.35
ATOM	4502	CG	LEU	H	164	44.574	66.520	35.594	1.00	39.11
ATOM	4503	CD1	LEU	H	164	43.318	67.107	34.869	1.00	35.69
ATOM	4504	CD2	LEU	H	164	45.605	67.584	36.001	1.00	33.96
ATOM	4505	N	THR	H	165	42.890	63.100	34.820	1.00	43.96
ATOM	4506	CA	THR	H	165	43.291	61.924	34.056	1.00	48.01
ATOM	4507	C	THR	H	165	43.174	62.199	32.569	1.00	48.89
ATOM	4508	O	THR	H	165	43.143	61.280	31.746	1.00	49.91
ATOM	4509	CB	THR	H	165	42.401	60.726	34.343	1.00	48.56
ATOM	4510	OG1	THR	H	165	41.056	61.180	34.522	1.00	51.38
ATOM	4511	CG2	THR	H	165	42.892	59.972	35.578	1.00	51.09
ATOM	4512	N	SER	H	166	43.075	63.468	32.219	1.00	48.74
ATOM	4513	CA	SER	H	166	42.968	63.806	30.821	1.00	48.21
ATOM	4514	C	SER	H	166	44.183	64.590	30.407	1.00	46.13
ATOM	4515	O	SER	H	166	44.542	65.586	31.039	1.00	45.59
ATOM	4516	CB	SER	H	166	41.710	64.638	30.554	1.00	53.12
ATOM	4517	OG	SER	H	166	41.628	65.028	29.188	1.00	58.13
ATOM	4518	N	GLY	H	167	44.801	64.137	29.328	1.00	43.93
ATOM	4519	CA	GLY	H	167	45.968	64.826	28.824	1.00	40.76
ATOM	4520	C	GLY	H	167	47.235	64.354	29.484	1.00	34.87
ATOM	4521	O	GLY	H	167	48.333	64.811	29.169	1.00	36.84
ATOM	4522	N	VAL	H	168	47.081	63.455	30.430	1.00	28.48
ATOM	4523	CA	VAL	H	168	48.241	62.924	31.096	1.00	28.20
ATOM	4524	C	VAL	H	168	48.864	61.920	30.155	1.00	27.98
ATOM	4525	O	VAL	H	168	48.143	61.197	29.463	1.00	27.44
ATOM	4526	CB	VAL	H	168	47.857	62.166	32.340	1.00	30.95
ATOM	4527	CG1	VAL	H	168	49.102	61.811	33.128	1.00	30.62
ATOM	4528	CG2	VAL	H	168	46.867	62.984	33.144	1.00	35.52
ATOM	4529	N	HIS	H	169	50.197	61.905	30.134	1.00	28.72
ATOM	4530	CA	HIS	H	169	51.024	60.998	29.325	1.00	25.44
ATOM	4531	C	HIS	H	169	52.150	60.717	30.322	1.00	27.36
ATOM	4532	O	HIS	H	169	53.074	61.540	30.488	1.00	27.92
ATOM	4533	CB	HIS	H	169	51.674	61.688	28.101	1.00	19.94
ATOM	4534	CG	HIS	H	169	50.720	62.234	27.085	1.00	19.95
ATOM	4535	ND1	HIS	H	169	49.965	61.426	26.263	1.00	22.27
ATOM	4536	CD2	HIS	H	169	50.435	63.509	26.714	1.00	28.95
ATOM	4537	CE1	HIS	H	169	49.259	62.185	25.430	1.00	29.79
ATOM	4538	NE2	HIS	H	169	49.526	63.455	25.683	1.00	21.26
ATOM	4539	N	THR	H	170	52.055	59.616	31.052	1.00	27.55
ATOM	4540	CA	THR	H	170	53.142	59.315	31.978	1.00	26.64
ATOM	4541	C	THR	H	170	54.025	58.255	31.303	1.00	27.35
ATOM	4542	O	THR	H	170	53.648	57.081	31.165	1.00	23.68
ATOM	4543	CB	THR	H	170	52.630	58.824	33.348	1.00	23.93
ATOM	4544	OG1	THR	H	170	53.584	57.920	33.913	1.00	18.06
ATOM	4545	CG2	THR	H	170	51.265	58.146	33.211	1.00	28.88
ATOM	4546	N	PHE	H	171	55.213	58.700	30.891	1.00	27.04
ATOM	4547	CA	PHE	H	171	56.171	57.870	30.174	1.00	21.61
ATOM	4548	C	PHE	H	171	56.697	56.611	30.825	1.00	21.96
ATOM	4549	O	PHE	H	171	56.633	56.423	32.034	1.00	27.49
ATOM	4550	CB	PHE	H	171	57.349	58.724	29.766	1.00	17.66
ATOM	4551	CG	PHE	H	171	56.985	59.808	28.846	1.00	10.40
ATOM	4552	CD1	PHE	H	171	56.523	61.005	29.333	1.00	11.08
ATOM	4553	CD2	PHE	H	171	57.055	59.615	27.494	1.00	10.27
ATOM	4554	CE1	PHE	H	171	56.121	62.004	28.472	1.00	19.79
ATOM	4555	CE2	PHE	H	171	56.658	60.603	26.623	1.00	17.65
ATOM	4556	CZ	PHE	H	171	56.187	61.802	27.106	1.00	18.77
ATOM	4557	N	PRO	H	172	57.196	55.693	30.009	1.00	20.48
ATOM	4558	CA	PRO	H	172	57.747	54.445	30.519	1.00	21.91

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ATOM	4559	C	PRO	H	172	59.068	54.775	31.159	1.00	23.82
ATOM	4560	O	PRO	H	172	59.721	55.739	30.762	1.00	22.17
ATOM	4561	CB	PRO	H	172	57.937	53.606	29.275	1.00	19.80
ATOM	4562	CG	PRO	H	172	58.069	54.556	28.200	1.00	17.91
ATOM	4563	CD	PRO	H	172	57.222	55.738	28.547	1.00	19.41
ATOM	4564	N	ALA	H	173	59.444	53.996	32.168	1.00	28.53
ATOM	4565	CA	ALA	H	173	60.713	54.198	32.858	1.00	31.04
ATOM	4566	C	ALA	H	173	61.881	53.905	31.941	1.00	34.04
ATOM	4567	O	ALA	H	173	61.782	53.079	31.015	1.00	35.99
ATOM	4568	CB	ALA	H	173	60.801	53.285	34.058	1.00	31.27
ATOM	4569	N	VAL	H	174	62.997	54.563	32.211	1.00	32.51
ATOM	4570	CA	VAL	H	174	64.168	54.322	31.422	1.00	33.95
ATOM	4571	C	VAL	H	174	65.357	54.345	32.356	1.00	36.15
ATOM	4572	O	VAL	H	174	65.680	55.363	32.966	1.00	36.14
ATOM	4573	CB	VAL	H	174	64.332	55.361	30.307	1.00	35.70
ATOM	4574	CG1	VAL	H	174	65.814	55.522	29.977	1.00	38.96
ATOM	4575	CG2	VAL	H	174	63.576	54.900	29.044	1.00	33.07
ATOM	4576	N	LEU	H	175	65.991	53.186	32.463	1.00	39.20
ATOM	4577	CA	LEU	H	175	67.163	52.984	33.299	1.00	37.88
ATOM	4578	C	LEU	H	175	68.292	53.868	32.821	1.00	40.50
ATOM	4579	O	LEU	H	175	68.998	53.530	31.867	1.00	43.15
ATOM	4580	CB	LEU	H	175	67.600	51.549	33.162	1.00	36.00
ATOM	4581	CG	LEU	H	175	68.475	51.012	34.254	1.00	33.65
ATOM	4582	CD1	LEU	H	175	68.164	51.739	35.564	1.00	34.16
ATOM	4583	CD2	LEU	H	175	68.228	49.513	34.336	1.00	35.49
ATOM	4584	N	GLN	H	176	68.466	55.011	33.453	1.00	41.23
ATOM	4585	CA	GLN	H	176	69.544	55.870	33.028	1.00	42.45
ATOM	4586	C	GLN	H	176	70.787	55.112	33.477	1.00	44.51
ATOM	4587	O	GLN	H	176	70.687	54.088	34.201	1.00	34.21
ATOM	4588	CB	GLN	H	176	69.471	57.219	33.738	1.00	42.85
ATOM	4589	CG	GLN	H	176	69.177	57.072	35.226	1.00	42.63
ATOM	4590	CD	GLN	H	176	68.256	58.153	35.759	1.00	41.52
ATOM	4591	OE1	GLN	H	176	68.275	59.295	35.290	1.00	41.37
ATOM	4592	NE2	GLN	H	176	67.450	57.801	36.746	1.00	37.83
ATOM	4593	N	SER	H	177	71.952	55.620	33.048	1.00	48.95
ATOM	4594	CA	SER	H	177	73.235	55.026	33.425	1.00	47.73
ATOM	4595	C	SER	H	177	73.161	54.995	34.948	1.00	49.21
ATOM	4596	O	SER	H	177	72.080	55.223	35.522	1.00	51.38
ATOM	4597	CB	SER	H	177	74.407	55.908	32.991	1.00	44.75
ATOM	4598	OG	SER	H	177	75.524	55.632	33.810	1.00	44.55
ATOM	4599	N	SER	H	178	74.273	54.752	35.630	1.00	46.10
ATOM	4600	CA	SER	H	178	74.166	54.678	37.081	1.00	44.81
ATOM	4601	C	SER	H	178	73.181	53.491	37.194	1.00	44.79
ATOM	4602	O	SER	H	178	72.950	52.789	36.185	1.00	46.89
ATOM	4603	CB	SER	H	178	73.558	55.966	37.661	1.00	38.93
ATOM	4604	OG	SER	H	178	72.210	55.735	38.048	1.00	37.26
ATOM	4605	N	GLY	H	179	72.573	53.265	38.354	1.00	40.62
ATOM	4606	CA	GLY	H	179	71.710	52.106	38.435	1.00	43.98
ATOM	4607	C	GLY	H	179	70.216	52.293	38.497	1.00	47.38
ATOM	4608	O	GLY	H	179	69.466	51.334	38.293	1.00	47.47
ATOM	4609	N	LEU	H	180	69.787	53.526	38.731	1.00	50.75
ATOM	4610	CA	LEU	H	180	68.364	53.839	38.893	1.00	52.78
ATOM	4611	C	LEU	H	180	67.532	54.245	37.667	1.00	53.37
ATOM	4612	O	LEU	H	180	68.055	54.669	36.626	1.00	56.69
ATOM	4613	CB	LEU	H	180	68.220	54.930	39.962	1.00	53.84
ATOM	4614	CG	LEU	H	180	69.489	55.161	40.782	1.00	53.21
ATOM	4615	CD1	LEU	H	180	70.379	56.252	40.137	1.00	47.43
ATOM	4616	CD2	LEU	H	180	69.076	55.525	42.189	1.00	53.01
ATOM	4617	N	TYR	H	181	66.217	54.127	37.826	1.00	51.72
ATOM	4618	CA	TYR	H	181	65.258	54.492	36.785	1.00	52.99

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ATOM	4619	C	TYR	H	181	64.796	55.956	36.904	1.00	52.04
ATOM	4620	O	TYR	H	181	64.897	56.571	37.972	1.00	52.39
ATOM	4621	CB	TYR	H	181	64.030	53.580	36.865	1.00	51.41
ATOM	4622	CG	TYR	H	181	64.354	52.149	36.597	1.00	50.22
ATOM	4623	CD1	TYR	H	181	64.802	51.754	35.344	1.00	51.41
ATOM	4624	CD2	TYR	H	181	64.287	51.201	37.609	1.00	50.50
ATOM	4625	CE1	TYR	H	181	65.188	50.460	35.101	1.00	50.91
ATOM	4626	CE2	TYR	H	181	64.670	49.895	37.382	1.00	51.31
ATOM	4627	CZ	TYR	H	181	65.129	49.535	36.119	1.00	52.16
ATOM	4628	OH	TYR	H	181	65.599	48.268	35.873	1.00	56.18
ATOM	4629	N	SER	H	182	64.287	56.511	35.806	1.00	49.29
ATOM	4630	CA	SER	H	182	63.791	57.882	35.832	1.00	46.20
ATOM	4631	C	SER	H	182	62.726	58.145	34.779	1.00	47.81
ATOM	4632	O	SER	H	182	63.028	58.276	33.577	1.00	51.29
ATOM	4633	CB	SER	H	182	64.916	58.884	35.620	1.00	43.89
ATOM	4634	OG	SER	H	182	64.372	60.126	35.197	1.00	38.12
ATOM	4635	N	LEU	H	183	61.483	58.242	35.241	1.00	45.78
ATOM	4636	CA	LEU	H	183	60.362	58.516	34.359	1.00	41.71
ATOM	4637	C	LEU	H	183	59.761	59.884	34.653	1.00	41.38
ATOM	4638	O	LEU	H	183	59.874	60.406	35.774	1.00	35.56
ATOM	4639	CB	LEU	H	183	59.294	57.424	34.489	1.00	36.64
ATOM	4640	CG	LEU	H	183	58.356	57.360	35.688	1.00	28.40
ATOM	4641	CD1	LEU	H	183	57.429	58.529	35.643	1.00	32.30
ATOM	4642	CD2	LEU	H	183	57.552	56.080	35.626	1.00	25.12
ATOM	4643	N	SER	H	184	59.141	60.463	33.627	1.00	41.99
ATOM	4644	CA	SER	H	184	58.502	61.770	33.755	1.00	42.51
ATOM	4645	C	SER	H	184	57.015	61.640	33.397	1.00	38.33
ATOM	4646	O	SER	H	184	56.650	61.058	32.367	1.00	37.13
ATOM	4647	CB	SER	H	184	59.196	62.795	32.823	1.00	47.05
ATOM	4648	OG	SER	H	184	59.530	64.016	33.486	1.00	52.94
ATOM	4649	N	SER	H	185	56.156	62.154	34.267	1.00	35.81
ATOM	4650	CA	SER	H	185	54.723	62.120	34.007	1.00	33.87
ATOM	4651	C	SER	H	185	54.298	63.515	33.596	1.00	32.29
ATOM	4652	O	SER	H	185	54.559	64.493	34.300	1.00	33.60
ATOM	4653	CB	SER	H	185	53.949	61.694	35.233	1.00	30.90
ATOM	4654	OG	SER	H	185	52.717	61.166	34.791	1.00	29.34
ATOM	4655	N	VAL	H	186	53.660	63.623	32.447	1.00	29.91
ATOM	4656	CA	VAL	H	186	53.291	64.940	31.980	1.00	29.38
ATOM	4657	C	VAL	H	186	51.829	65.057	31.601	1.00	30.52
ATOM	4658	O	VAL	H	186	51.158	64.057	31.323	1.00	31.30
ATOM	4659	CB	VAL	H	186	54.211	65.336	30.789	1.00	25.42
ATOM	4660	CG1	VAL	H	186	53.597	66.461	29.955	1.00	25.66
ATOM	4661	CG2	VAL	H	186	55.556	65.746	31.326	1.00	24.60
ATOM	4662	N	VAL	H	187	51.341	66.297	31.606	1.00	29.95
ATOM	4663	CA	VAL	H	187	49.952	66.587	31.267	1.00	26.90
ATOM	4664	C	VAL	H	187	49.825	67.966	30.636	1.00	21.23
ATOM	4665	O	VAL	H	187	50.510	68.919	31.028	1.00	22.95
ATOM	4666	CB	VAL	H	187	49.065	66.578	32.538	1.00	30.77
ATOM	4667	CG1	VAL	H	187	49.754	67.430	33.657	1.00	29.70
ATOM	4668	CG2	VAL	H	187	47.663	67.127	32.213	1.00	29.13
ATOM	4669	N	THR	H	188	48.924	68.079	29.678	1.00	16.12
ATOM	4670	CA	THR	H	188	48.698	69.353	29.034	1.00	18.69
ATOM	4671	C	THR	H	188	47.319	69.850	29.468	1.00	24.69
ATOM	4672	O	THR	H	188	46.316	69.119	29.495	1.00	29.28
ATOM	4673	CB	THR	H	188	48.811	69.223	27.534	1.00	16.20
ATOM	4674	OG1	THR	H	188	47.741	68.429	27.025	1.00	14.26
ATOM	4675	CG2	THR	H	188	50.095	68.528	27.204	1.00	20.96
ATOM	4676	N	VAL	H	189	47.298	71.099	29.883	1.00	25.86
ATOM	4677	CA	VAL	H	189	46.095	71.707	30.375	1.00	23.28
ATOM	4678	C	VAL	H	189	45.978	73.031	29.680	1.00	30.01

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ATOM	4679	O	VAL	H	189	46.963	73.539	29.150	1.00	33.04
ATOM	4680	CB	VAL	H	189	46.239	71.945	31.889	1.00	20.25
ATOM	4681	CG1	VAL	H	189	46.593	70.622	32.580	1.00	13.20
ATOM	4682	CG2	VAL	H	189	47.301	73.036	32.152	1.00	13.81
ATOM	4683	N	PRO	H	190	44.782	73.632	29.698	1.00	32.80
ATOM	4684	CA	PRO	H	190	44.608	74.927	29.045	1.00	32.81
ATOM	4685	C	PRO	H	190	45.471	75.916	29.786	1.00	32.87
ATOM	4686	O	PRO	H	190	45.581	75.858	30.999	1.00	30.84
ATOM	4687	CB	PRO	H	190	43.130	75.224	29.213	1.00	32.02
ATOM	4688	CG	PRO	H	190	42.511	73.903	29.582	1.00	32.24
ATOM	4689	CD	PRO	H	190	43.547	73.176	30.343	1.00	34.55
ATOM	4690	N	SER	H	191	46.122	76.791	29.047	1.00	37.54
ATOM	4691	CA	SER	H	191	46.979	77.787	29.659	1.00	44.04
ATOM	4692	C	SER	H	191	46.164	78.647	30.610	1.00	47.16
ATOM	4693	O	SER	H	191	46.514	78.810	31.789	1.00	50.07
ATOM	4694	CB	SER	H	191	47.606	78.663	28.578	1.00	45.27
ATOM	4695	OG	SER	H	191	49.019	78.670	28.683	1.00	45.85
ATOM	4696	N	SER	H	192	45.068	79.192	30.089	1.00	47.55
ATOM	4697	CA	SER	H	192	44.184	80.037	30.876	1.00	49.04
ATOM	4698	C	SER	H	192	43.838	79.401	32.237	1.00	50.31
ATOM	4699	O	SER	H	192	43.336	80.062	33.137	1.00	56.22
ATOM	4700	CB	SER	H	192	42.902	80.288	30.099	1.00	48.76
ATOM	4701	OG	SER	H	192	41.857	79.503	30.645	1.00	48.66
ATOM	4702	N	SER	H	193	44.109	78.123	32.398	1.00	47.22
ATOM	4703	CA	SER	H	193	43.805	77.470	33.648	1.00	48.94
ATOM	4704	C	SER	H	193	44.793	77.776	34.763	1.00	49.50
ATOM	4705	O	SER	H	193	44.393	78.050	35.894	1.00	52.42
ATOM	4706	CB	SER	H	193	43.748	75.948	33.439	1.00	54.10
ATOM	4707	OG	SER	H	193	45.036	75.328	33.503	1.00	50.85
ATOM	4708	N	LEU	H	194	46.080	77.694	34.448	1.00	49.29
ATOM	4709	CA	LEU	H	194	47.137	77.892	35.433	1.00	53.38
ATOM	4710	C	LEU	H	194	46.807	78.816	36.587	1.00	56.52
ATOM	4711	O	LEU	H	194	47.327	78.662	37.708	1.00	55.89
ATOM	4712	CB	LEU	H	194	48.428	78.337	34.739	1.00	52.47
ATOM	4713	CG	LEU	H	194	48.913	77.324	33.678	1.00	49.98
ATOM	4714	CD1	LEU	H	194	49.254	78.057	32.369	1.00	47.94
ATOM	4715	CD2	LEU	H	194	50.107	76.547	34.187	1.00	43.98
ATOM	4716	N	GLY	H	195	45.902	79.751	36.320	1.00	61.53
ATOM	4717	CA	GLY	H	195	45.495	80.704	37.342	1.00	64.64
ATOM	4718	C	GLY	H	195	44.472	80.187	38.350	1.00	62.10
ATOM	4719	O	GLY	H	195	44.748	80.084	39.550	1.00	64.18
ATOM	4720	N	THR	H	196	43.294	79.841	37.854	1.00	58.83
ATOM	4721	CA	THR	H	196	42.222	79.359	38.707	1.00	58.30
ATOM	4722	C	THR	H	196	42.406	77.892	39.144	1.00	61.54
ATOM	4723	O	THR	H	196	41.807	77.443	40.139	1.00	62.29
ATOM	4724	CB	THR	H	196	40.894	79.475	37.972	1.00	53.59
ATOM	4725	OG1	THR	H	196	40.512	78.189	37.474	1.00	51.45
ATOM	4726	CG2	THR	H	196	41.031	80.406	36.810	1.00	50.05
ATOM	4727	N	GLN	H	197	43.245	77.156	38.414	1.00	61.08
ATOM	4728	CA	GLN	H	197	43.455	75.734	38.691	1.00	61.43
ATOM	4729	C	GLN	H	197	44.815	75.361	39.258	1.00	60.16
ATOM	4730	O	GLN	H	197	45.837	75.961	38.898	1.00	62.71
ATOM	4731	CB	GLN	H	197	43.214	74.926	37.410	1.00	63.30
ATOM	4732	CG	GLN	H	197	41.955	74.074	37.427	1.00	66.84
ATOM	4733	CD	GLN	H	197	42.041	72.931	38.428	1.00	70.67
ATOM	4734	OE1	GLN	H	197	42.725	73.034	39.465	1.00	71.23
ATOM	4735	NE2	GLN	H	197	41.347	71.830	38.129	1.00	70.19
ATOM	4736	N	THR	H	198	44.814	74.381	40.159	1.00	55.50
ATOM	4737	CA	THR	H	198	46.047	73.892	40.771	1.00	54.41
ATOM	4738	C	THR	H	198	46.276	72.468	40.290	1.00	53.06

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ATOM	4739	O	THR	H	198	45.329	71.806	39.885	1.00	56.34
ATOM	4740	CB	THR	H	198	45.947	73.840	42.305	1.00	53.52
ATOM	4741	OG1	THR	H	198	47.128	73.230	42.848	1.00	51.30
ATOM	4742	CG2	THR	H	198	44.743	73.011	42.716	1.00	55.70
ATOM	4743	N	TYR	H	199	47.521	71.997	40.359	1.00	48.30
ATOM	4744	CA	TYR	H	199	47.859	70.638	39.938	1.00	38.72
ATOM	4745	C	TYR	H	199	48.927	70.004	40.813	1.00	38.96
ATOM	4746	O	TYR	H	199	49.958	70.626	41.136	1.00	39.64
ATOM	4747	CB	TYR	H	199	48.384	70.628	38.526	1.00	31.48
ATOM	4748	CG	TYR	H	199	47.455	71.208	37.523	1.00	25.85
ATOM	4749	CD1	TYR	H	199	46.244	70.600	37.242	1.00	23.65
ATOM	4750	CD2	TYR	H	199	47.810	72.343	36.812	1.00	24.96
ATOM	4751	CE1	TYR	H	199	45.402	71.110	36.266	1.00	23.30
ATOM	4752	CE2	TYR	H	199	46.983	72.863	35.834	1.00	25.93
ATOM	4753	CZ	TYR	H	199	45.780	72.248	35.562	1.00	25.42
ATOM	4754	OH	TYR	H	199	44.965	72.811	34.597	1.00	29.31
ATOM	4755	N	ILE	H	200	48.690	68.758	41.188	1.00	34.68
ATOM	4756	CA	ILE	H	200	49.648	68.061	42.004	1.00	35.18
ATOM	4757	C	ILE	H	200	49.821	66.699	41.417	1.00	37.66
ATOM	4758	O	ILE	H	200	48.862	66.090	40.941	1.00	41.08
ATOM	4759	CB	ILE	H	200	49.176	67.867	43.451	1.00	36.74
ATOM	4760	CG1	ILE	H	200	48.011	68.816	43.774	1.00	40.23
ATOM	4761	CG2	ILE	H	200	50.370	68.033	44.390	1.00	36.00
ATOM	4762	CD1	ILE	H	200	48.426	70.256	44.199	1.00	45.79
ATOM	4763	N	CYS	H	201	51.060	66.231	41.418	1.00	36.86
ATOM	4764	CA	CYS	H	201	51.353	64.902	40.933	1.00	34.08
ATOM	4765	C	CYS	H	201	51.527	64.051	42.164	1.00	31.45
ATOM	4766	O	CYS	H	201	51.986	64.540	43.207	1.00	29.21
ATOM	4767	CB	CYS	H	201	52.636	64.874	40.087	1.00	36.91
ATOM	4768	SG	CYS	H	201	54.291	65.157	40.839	1.00	33.27
ATOM	4769	N	ASN	H	202	51.184	62.779	42.039	1.00	29.88
ATOM	4770	CA	ASN	H	202	51.305	61.888	43.160	1.00	35.87
ATOM	4771	C	ASN	H	202	52.198	60.690	42.896	1.00	39.56
ATOM	4772	O	ASN	H	202	51.709	59.626	42.497	1.00	43.82
ATOM	4773	CB	ASN	H	202	49.929	61.414	43.554	1.00	37.70
ATOM	4774	CG	ASN	H	202	48.861	62.423	43.223	1.00	40.65
ATOM	4775	OD1	ASN	H	202	47.998	62.171	42.374	1.00	38.96
ATOM	4776	ND2	ASN	H	202	48.901	63.580	43.905	1.00	41.87
ATOM	4777	N	VAL	H	203	53.499	60.845	43.131	1.00	40.14
ATOM	4778	CA	VAL	H	203	54.401	59.734	42.913	1.00	40.33
ATOM	4779	C	VAL	H	203	54.298	58.793	44.085	1.00	43.46
ATOM	4780	O	VAL	H	203	54.273	59.210	45.236	1.00	38.99
ATOM	4781	CB	VAL	H	203	55.862	60.175	42.794	1.00	38.94
ATOM	4782	CG1	VAL	H	203	56.759	59.160	43.455	1.00	34.59
ATOM	4783	CG2	VAL	H	203	56.244	60.291	41.347	1.00	42.40
ATOM	4784	N	ASN	H	204	54.212	57.508	43.780	1.00	51.06
ATOM	4785	CA	ASN	H	204	54.162	56.504	44.826	1.00	55.70
ATOM	4786	C	ASN	H	204	55.109	55.345	44.479	1.00	56.74
ATOM	4787	O	ASN	H	204	54.868	54.602	43.505	1.00	56.97
ATOM	4788	CB	ASN	H	204	52.760	55.948	44.986	1.00	60.55
ATOM	4789	CG	ASN	H	204	52.769	54.592	45.668	1.00	66.10
ATOM	4790	OD1	ASN	H	204	52.635	53.544	45.023	1.00	69.86
ATOM	4791	ND2	ASN	H	204	52.951	54.605	46.983	1.00	66.35
ATOM	4792	N	HIS	H	205	56.175	55.200	45.271	1.00	54.92
ATOM	4793	CA	HIS	H	205	57.152	54.138	45.067	1.00	53.62
ATOM	4794	C	HIS	H	205	57.095	53.041	46.140	1.00	54.64
ATOM	4795	O	HIS	H	205	57.989	52.930	46.988	1.00	52.54
ATOM	4796	CB	HIS	H	205	58.557	54.713	45.009	1.00	50.11
ATOM	4797	CG	HIS	H	205	59.578	53.713	44.577	1.00	54.92
ATOM	4798	ND1	HIS	H	205	59.270	52.619	43.799	1.00	52.68

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ATOM	4799	CD2	HIS	H	205	60.910	53.633	44.826	1.00	57.93
ATOM	4800	CE1	HIS	H	205	60.362	51.905	43.588	1.00	54.43
ATOM	4801	NE2	HIS	H	205	61.371	52.501	44.199	1.00	57.40
ATOM	4802	N	LYS	H	206	56.044	52.220	46.070	1.00	55.01
ATOM	4803	CA	LYS	H	206	55.811	51.128	47.017	1.00	53.18
ATOM	4804	C	LYS	H	206	57.058	50.372	47.413	1.00	51.75
ATOM	4805	O	LYS	H	206	57.316	50.192	48.587	1.00	50.80
ATOM	4806	CB	LYS	H	206	54.779	50.153	46.458	1.00	56.16
ATOM	4807	CG	LYS	H	206	53.426	50.806	46.176	1.00	63.16
ATOM	4808	CD	LYS	H	206	52.253	49.858	46.471	1.00	66.98
ATOM	4809	CE	LYS	H	206	50.906	50.450	46.012	1.00	68.34
ATOM	4810	NZ	LYS	H	206	50.892	50.863	44.569	1.00	71.64
ATOM	4811	N	PRO	H	207	57.837	49.896	46.439	1.00	52.82
ATOM	4812	CA	PRO	H	207	59.074	49.153	46.731	1.00	53.46
ATOM	4813	C	PRO	H	207	59.999	49.844	47.732	1.00	53.76
ATOM	4814	O	PRO	H	207	61.074	49.351	48.054	1.00	51.71
ATOM	4815	CB	PRO	H	207	59.725	49.003	45.370	1.00	54.47
ATOM	4816	CG	PRO	H	207	58.550	48.980	44.428	1.00	57.98
ATOM	4817	CD	PRO	H	207	57.582	49.984	44.992	1.00	54.81
ATOM	4818	N	SER	H	208	59.577	50.990	48.231	1.00	55.95
ATOM	4819	CA	SER	H	208	60.380	51.704	49.196	1.00	58.88
ATOM	4820	C	SER	H	208	59.427	52.455	50.123	1.00	61.85
ATOM	4821	O	SER	H	208	59.861	53.289	50.922	1.00	65.55
ATOM	4822	CB	SER	H	208	61.322	52.678	48.474	1.00	59.21
ATOM	4823	OG	SER	H	208	60.599	53.528	47.599	1.00	57.38
ATOM	4824	N	ASN	H	209	58.132	52.165	50.007	1.00	61.89
ATOM	4825	CA	ASN	H	209	57.119	52.819	50.835	1.00	64.05
ATOM	4826	C	ASN	H	209	57.006	54.294	50.426	1.00	62.67
ATOM	4827	O	ASN	H	209	56.136	55.027	50.875	1.00	61.92
ATOM	4828	CB	ASN	H	209	57.523	52.690	52.317	1.00	70.30
ATOM	4829	CG	ASN	H	209	57.011	53.846	53.184	1.00	77.03
ATOM	4830	OD1	ASN	H	209	55.799	54.040	53.319	1.00	82.61
ATOM	4831	ND2	ASN	H	209	57.932	54.614	53.783	1.00	77.56
ATOM	4832	N	THR	H	210	57.899	54.724	49.553	1.00	62.72
ATOM	4833	CA	THR	H	210	57.920	56.103	49.112	1.00	64.35
ATOM	4834	C	THR	H	210	56.598	56.613	48.537	1.00	63.62
ATOM	4835	O	THR	H	210	55.834	55.878	47.911	1.00	62.06
ATOM	4836	CB	THR	H	210	59.046	56.309	48.055	1.00	68.43
ATOM	4837	OG1	THR	H	210	60.331	56.223	48.696	1.00	68.77
ATOM	4838	CG2	THR	H	210	58.903	57.680	47.350	1.00	69.68
ATOM	4839	N	LYS	H	211	56.355	57.900	48.751	1.00	62.65
ATOM	4840	CA	LYS	H	211	55.166	58.563	48.246	1.00	62.78
ATOM	4841	C	LYS	H	211	55.386	60.071	48.367	1.00	60.81
ATOM	4842	O	LYS	H	211	55.775	60.558	49.424	1.00	60.72
ATOM	4843	CB	LYS	H	211	53.933	58.143	49.045	1.00	65.13
ATOM	4844	CG	LYS	H	211	52.985	59.290	49.382	1.00	69.93
ATOM	4845	CD	LYS	H	211	51.810	59.376	48.408	1.00	74.60
ATOM	4846	CE	LYS	H	211	50.725	60.320	48.940	1.00	77.09
ATOM	4847	NZ	LYS	H	211	49.554	60.484	48.022	1.00	78.23
ATOM	4848	N	VAL	H	212	55.139	60.801	47.282	1.00	57.00
ATOM	4849	CA	VAL	H	212	55.321	62.241	47.265	1.00	51.78
ATOM	4850	C	VAL	H	212	54.186	62.876	46.473	1.00	53.82
ATOM	4851	O	VAL	H	212	53.615	62.244	45.573	1.00	53.90
ATOM	4852	CB	VAL	H	212	56.643	62.611	46.580	1.00	48.57
ATOM	4853	CG1	VAL	H	212	56.767	64.132	46.474	1.00	45.95
ATOM	4854	CG2	VAL	H	212	57.810	61.993	47.332	1.00	46.45
ATOM	4855	N	ASP	H	213	53.872	64.126	46.806	1.00	53.81
ATOM	4856	CA	ASP	H	213	52.824	64.873	46.120	1.00	50.44
ATOM	4857	C	ASP	H	213	53.387	66.228	45.756	1.00	47.45
ATOM	4858	O	ASP	H	213	53.358	67.153	46.567	1.00	46.58

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ATOM	4859	CB	ASP	H	213	51.618	65.045	47.032	1.00	54.71
ATOM	4860	CG	ASP	H	213	50.958	63.724	47.361	1.00	60.65
ATOM	4861	OD1	ASP	H	213	50.820	62.922	46.416	1.00	63.96
ATOM	4862	OD2	ASP	H	213	50.581	63.473	48.539	1.00	65.23
ATOM	4863	N	LYS	H	214	53.938	66.319	44.548	1.00	44.87
ATOM	4864	CA	LYS	H	214	54.523	67.564	44.045	1.00	40.91
ATOM	4865	C	LYS	H	214	53.437	68.473	43.464	1.00	41.13
ATOM	4866	O	LYS	H	214	52.699	68.090	42.540	1.00	38.51
ATOM	4867	CB	LYS	H	214	55.577	67.261	42.971	0.00	36.30
ATOM	4868	CG	LYS	H	214	56.818	68.146	43.013	0.00	31.06
ATOM	4869	CD	LYS	H	214	56.594	69.452	42.271	0.00	27.12
ATOM	4870	CE	LYS	H	214	56.680	70.640	43.213	0.00	24.68
ATOM	4871	NZ	LYS	H	214	58.019	70.740	43.855	0.00	22.71
ATOM	4872	N	LYS	H	215	53.317	69.666	44.042	1.00	39.91
ATOM	4873	CA	LYS	H	215	52.345	70.626	43.563	1.00	36.01
ATOM	4874	C	LYS	H	215	53.092	71.326	42.438	1.00	37.92
ATOM	4875	O	LYS	H	215	54.040	72.097	42.671	1.00	40.05
ATOM	4876	CB	LYS	H	215	51.970	71.619	44.665	0.00	31.54
ATOM	4877	CG	LYS	H	215	51.067	72.756	44.203	0.00	25.87
ATOM	4878	CD	LYS	H	215	50.307	73.369	45.370	0.00	21.61
ATOM	4879	CE	LYS	H	215	51.074	74.532	45.981	0.00	18.92
ATOM	4880	NZ	LYS	H	215	50.517	74.934	47.303	0.00	16.76
ATOM	4881	N	VAL	H	216	52.712	71.029	41.208	1.00	35.59
ATOM	4882	CA	VAL	H	216	53.392	71.689	40.122	1.00	35.52
ATOM	4883	C	VAL	H	216	52.795	73.084	40.016	1.00	36.65
ATOM	4884	O	VAL	H	216	51.581	73.256	39.903	1.00	36.76
ATOM	4885	CB	VAL	H	216	53.219	70.936	38.776	1.00	35.14
ATOM	4886	CG1	VAL	H	216	54.228	71.475	37.743	1.00	34.25
ATOM	4887	CG2	VAL	H	216	53.414	69.430	38.985	1.00	33.03
ATOM	4888	N	GLU	H	217	53.655	74.085	40.079	1.00	38.53
ATOM	4889	CA	GLU	H	217	53.194	75.448	39.944	1.00	41.66
ATOM	4890	C	GLU	H	217	53.998	76.092	38.816	1.00	42.43
ATOM	4891	O	GLU	H	217	55.163	75.760	38.599	1.00	44.71
ATOM	4892	CB	GLU	H	217	53.389	76.195	41.255	1.00	46.70
ATOM	4893	CG	GLU	H	217	52.895	75.405	42.456	1.00	51.58
ATOM	4894	CD	GLU	H	217	53.124	76.144	43.751	1.00	57.53
ATOM	4895	OE1	GLU	H	217	54.047	75.741	44.501	1.00	60.61
ATOM	4896	OE2	GLU	H	217	52.385	77.129	44.010	1.00	60.96
ATOM	4897	N	PRO	H	218	53.386	77.023	38.080	1.00	41.38
ATOM	4898	CA	PRO	H	218	54.034	77.720	36.965	1.00	39.54
ATOM	4899	C	PRO	H	218	55.139	78.650	37.403	1.00	40.70
ATOM	4900	O	PRO	H	218	54.923	79.850	37.479	1.00	44.21
ATOM	4901	CB	PRO	H	218	52.901	78.504	36.316	1.00	35.18
ATOM	4902	CG	PRO	H	218	51.971	78.764	37.434	1.00	36.67
ATOM	4903	CD	PRO	H	218	52.012	77.499	38.283	1.00	40.50
ATOM	4904	N	LYS	H	219	56.307	78.100	37.721	1.00	42.71
ATOM	4905	CA	LYS	H	219	57.446	78.925	38.101	1.00	42.57
ATOM	4906	C	LYS	H	219	57.923	79.534	36.769	1.00	47.38
ATOM	4907	O	LYS	H	219	57.183	80.386	36.218	1.00	46.83
ATOM	4908	CB	LYS	H	219	58.554	78.065	38.720	0.00	38.02
ATOM	4909	CG	LYS	H	219	58.776	78.310	40.206	0.00	32.30
ATOM	4910	CD	LYS	H	219	60.258	78.378	40.540	0.00	27.80
ATOM	4911	CE	LYS	H	219	60.773	77.044	41.058	0.00	24.93
ATOM	4912	NZ	LYS	H	219	61.288	76.182	39.958	0.00	22.66
ATOM	4913	OT	LYS	H	219	59.008	79.135	36.267	1.00	52.34
ATOM	4914	N	ASP	L	1	72.194	28.449	13.613	1.00	27.21
ATOM	4915	CA	ASP	L	1	70.775	28.664	13.986	1.00	18.78
ATOM	4916	C	ASP	L	1	70.067	29.279	12.804	1.00	21.48
ATOM	4917	O	ASP	L	1	70.681	30.034	12.041	1.00	27.40
ATOM	4918	CB	ASP	L	1	70.689	29.619	15.176	1.00	13.75



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ATOM	4919	CG	ASP	L	1	71.209	29.003	16.421	1.00	13.71
ATOM	4920	OD1	ASP	L	1	71.817	27.921	16.276	1.00	15.42
ATOM	4921	OD2	ASP	L	1	71.018	29.569	17.522	1.00	12.52
ATOM	4922	N	ILE	L	2	68.778	28.972	12.654	1.00	16.07
ATOM	4923	CA	ILE	L	2	67.993	29.547	11.564	1.00	10.83
ATOM	4924	C	ILE	L	2	67.645	30.983	11.933	1.00	9.71
ATOM	4925	O	ILE	L	2	67.471	31.277	13.114	1.00	17.95
ATOM	4926	CB	ILE	L	2	66.706	28.782	11.353	1.00	5.76
ATOM	4927	CG1	ILE	L	2	66.995	27.290	11.345	1.00	2.00
ATOM	4928	CG2	ILE	L	2	66.050	29.217	10.040	1.00	6.77
ATOM	4929	CD1	ILE	L	2	66.123	26.536	10.403	1.00	2.00
ATOM	4930	N	VAL	L	3	67.580	31.893	10.972	1.00	4.57
ATOM	4931	CA	VAL	L	3	67.248	33.282	11.298	1.00	8.48
ATOM	4932	C	VAL	L	3	66.012	33.707	10.556	1.00	12.15
ATOM	4933	O	VAL	L	3	65.979	33.625	9.324	1.00	14.35
ATOM	4934	CB	VAL	L	3	68.406	34.218	10.947	1.00	2.00
ATOM	4935	CG1	VAL	L	3	68.125	35.605	11.357	1.00	2.00
ATOM	4936	CG2	VAL	L	3	69.625	33.757	11.657	1.00	6.47
ATOM	4937	N	LEU	L	4	64.981	34.131	11.304	1.00	15.33
ATOM	4938	CA	LEU	L	4	63.719	34.540	10.668	1.00	11.09
ATOM	4939	C	LEU	L	4	63.639	36.011	10.632	1.00	5.86
ATOM	4940	O	LEU	L	4	63.900	36.642	11.631	1.00	4.39
ATOM	4941	CB	LEU	L	4	62.499	33.987	11.405	1.00	9.45
ATOM	4942	CG	LEU	L	4	62.567	32.469	11.566	1.00	7.43
ATOM	4943	CD1	LEU	L	4	61.365	31.954	12.275	1.00	11.00
ATOM	4944	CD2	LEU	L	4	62.674	31.835	10.230	1.00	2.00
ATOM	4945	N	THR	L	5	63.297	36.552	9.475	1.00	3.63
ATOM	4946	CA	THR	L	5	63.225	37.988	9.320	1.00	7.93
ATOM	4947	C	THR	L	5	61.827	38.284	8.981	1.00	11.72
ATOM	4948	O	THR	L	5	61.349	37.748	7.972	1.00	13.99
ATOM	4949	CB	THR	L	5	64.084	38.433	8.167	1.00	3.55
ATOM	4950	OG1	THR	L	5	65.444	38.373	8.577	1.00	13.86
ATOM	4951	CG2	THR	L	5	63.776	39.835	7.778	1.00	2.00
ATOM	4952	N	GLN	L	6	61.157	39.101	9.808	1.00	10.79
ATOM	4953	CA	GLN	L	6	59.752	39.426	9.515	1.00	8.12
ATOM	4954	C	GLN	L	6	59.707	40.703	8.745	1.00	2.00
ATOM	4955	O	GLN	L	6	60.699	41.300	8.545	1.00	4.55
ATOM	4956	CB	GLN	L	6	58.919	39.597	10.794	1.00	9.77
ATOM	4957	CG	GLN	L	6	59.080	38.481	11.800	1.00	14.36
ATOM	4958	CD	GLN	L	6	58.082	38.562	12.911	1.00	10.53
ATOM	4959	OE1	GLN	L	6	58.217	37.898	13.933	1.00	11.83
ATOM	4960	NE2	GLN	L	6	57.054	39.358	12.706	1.00	10.21
ATOM	4961	N	SER	L	7	58.535	41.140	8.365	1.00	4.88
ATOM	4962	CA	SER	L	7	58.379	42.365	7.616	1.00	6.77
ATOM	4963	C	SER	L	7	56.899	42.583	7.272	1.00	8.70
ATOM	4964	O	SER	L	7	56.184	41.654	6.885	1.00	13.89
ATOM	4965	CB	SER	L	7	59.185	42.279	6.333	1.00	6.50
ATOM	4966	OG	SER	L	7	58.467	42.822	5.246	1.00	6.57
ATOM	4967	N	PRO	L	8	56.432	43.830	7.339	1.00	3.61
ATOM	4968	CA	PRO	L	8	57.178	45.030	7.704	1.00	2.00
ATOM	4969	C	PRO	L	8	57.448	44.882	9.144	1.00	2.00
ATOM	4970	O	PRO	L	8	56.993	43.924	9.735	1.00	3.30
ATOM	4971	CB	PRO	L	8	56.194	46.154	7.455	1.00	3.69
ATOM	4972	CG	PRO	L	8	54.887	45.509	7.579	1.00	3.51
ATOM	4973	CD	PRO	L	8	55.047	44.150	6.985	1.00	2.00
ATOM	4974	N	ALA	L	9	58.224	45.782	9.711	1.00	2.00
ATOM	4975	CA	ALA	L	9	58.480	45.684	11.113	1.00	6.43
ATOM	4976	C	ALA	L	9	57.229	46.260	11.776	1.00	10.39
ATOM	4977	O	ALA	L	9	56.770	45.762	12.814	1.00	14.56
ATOM	4978	CB	ALA	L	9	59.707	46.467	11.447	1.00	8.18

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ATOM	4979	N	THR	L	10	56.674	47.297	11.154	1.00	8.37
ATOM	4980	CA	THR	L	10	55.458	47.924	11.640	1.00	6.71
ATOM	4981	C	THR	L	10	54.484	47.914	10.505	1.00	8.71
ATOM	4982	O	THR	L	10	54.802	48.391	9.421	1.00	8.94
ATOM	4983	CB	THR	L	10	55.607	49.377	11.925	1.00	8.52
ATOM	4984	OG1	THR	L	10	56.548	49.590	12.982	1.00	13.94
ATOM	4985	CG2	THR	L	10	54.258	49.931	12.305	1.00	14.46
ATOM	4986	N	LEU	L	11	53.284	47.412	10.767	1.00	11.31
ATOM	4987	CA	LEU	L	11	52.230	47.362	9.764	1.00	6.53
ATOM	4988	C	LEU	L	11	51.142	48.166	10.436	1.00	4.26
ATOM	4989	O	LEU	L	11	50.690	47.818	11.533	1.00	2.00
ATOM	4990	CB	LEU	L	11	51.789	45.924	9.530	1.00	2.00
ATOM	4991	CG	LEU	L	11	50.810	45.617	8.403	1.00	2.00
ATOM	4992	CD1	LEU	L	11	49.640	46.496	8.546	1.00	7.38
ATOM	4993	CD2	LEU	L	11	51.412	45.875	7.080	1.00	8.83
ATOM	4994	N	SER	L	12	50.814	49.297	9.821	1.00	3.65
ATOM	4995	CA	SER	L	12	49.782	50.183	10.326	1.00	3.33
ATOM	4996	C	SER	L	12	48.612	49.960	9.426	1.00	4.08
ATOM	4997	O	SER	L	12	48.632	50.265	8.236	1.00	3.46
ATOM	4998	CB	SER	L	12	50.221	51.637	10.254	1.00	2.64
ATOM	4999	OG	SER	L	12	51.458	51.770	10.924	1.00	15.57
ATOM	5000	N	VAL	L	13	47.571	49.446	10.041	1.00	6.91
ATOM	5001	CA	VAL	L	13	46.357	49.118	9.367	1.00	6.05
ATOM	5002	C	VAL	L	13	45.230	49.733	10.211	1.00	9.74
ATOM	5003	O	VAL	L	13	45.419	50.107	11.393	1.00	8.97
ATOM	5004	CB	VAL	L	13	46.274	47.571	9.311	1.00	2.07
ATOM	5005	CG1	VAL	L	13	45.715	47.050	10.601	1.00	6.98
ATOM	5006	CG2	VAL	L	13	45.490	47.100	8.081	1.00	4.23
ATOM	5007	N	SER	L	14	44.056	49.855	9.615	1.00	11.23
ATOM	5008	CA	SER	L	14	42.910	50.390	10.347	1.00	12.44
ATOM	5009	C	SER	L	14	41.986	49.212	10.579	1.00	10.13
ATOM	5010	O	SER	L	14	42.119	48.188	9.896	1.00	5.23
ATOM	5011	CB	SER	L	14	42.184	51.439	9.517	1.00	16.10
ATOM	5012	OG	SER	L	14	41.966	50.970	8.190	1.00	23.29
ATOM	5013	N	PRO	L	15	41.072	49.315	11.572	1.00	8.94
ATOM	5014	CA	PRO	L	15	40.162	48.186	11.806	1.00	3.06
ATOM	5015	C	PRO	L	15	39.425	48.134	10.506	1.00	2.00
ATOM	5016	O	PRO	L	15	39.252	49.158	9.846	1.00	2.00
ATOM	5017	CB	PRO	L	15	39.275	48.645	12.952	1.00	2.00
ATOM	5018	CG	PRO	L	15	40.036	49.787	13.611	1.00	2.00
ATOM	5019	CD	PRO	L	15	40.845	50.424	12.514	1.00	5.96
ATOM	5020	N	GLY	L	16	39.004	46.953	10.117	1.00	3.62
ATOM	5021	CA	GLY	L	16	38.316	46.857	8.857	1.00	10.65
ATOM	5022	C	GLY	L	16	39.298	46.703	7.731	1.00	15.49
ATOM	5023	O	GLY	L	16	38.904	46.376	6.622	1.00	19.78
ATOM	5024	N	GLU	L	17	40.576	46.942	7.999	1.00	21.46
ATOM	5025	CA	GLU	L	17	41.591	46.809	6.949	1.00	21.52
ATOM	5026	C	GLU	L	17	42.165	45.404	7.058	1.00	18.00
ATOM	5027	O	GLU	L	17	42.264	44.855	8.157	1.00	14.41
ATOM	5028	CB	GLU	L	17	42.708	47.867	7.132	1.00	24.29
ATOM	5029	CG	GLU	L	17	43.479	48.209	5.860	1.00	28.56
ATOM	5030	CD	GLU	L	17	44.579	49.301	6.028	1.00	38.15
ATOM	5031	OE1	GLU	L	17	44.733	49.876	7.159	1.00	32.69
ATOM	5032	OE2	GLU	L	17	45.285	49.561	4.992	1.00	34.71
ATOM	5033	N	ARG	L	18	42.527	44.819	5.926	1.00	14.53
ATOM	5034	CA	ARG	L	18	43.123	43.494	5.954	1.00	16.48
ATOM	5035	C	ARG	L	18	44.651	43.674	6.095	1.00	16.56
ATOM	5036	O	ARG	L	18	45.267	44.579	5.529	1.00	20.30
ATOM	5037	CB	ARG	L	18	42.786	42.733	4.677	1.00	19.27
ATOM	5038	CG	ARG	L	18	43.802	41.685	4.273	1.00	21.28

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ATOM	5039	CD	ARG	L	18	43.617	41.374	2.803	1.00	25.64
ATOM	5040	NE	ARG	L	18	43.659	39.941	2.539	1.00	34.48
ATOM	5041	CZ	ARG	L	18	43.973	39.416	1.358	1.00	39.15
ATOM	5042	NH1	ARG	L	18	44.269	40.227	0.347	1.00	38.92
ATOM	5043	NH2	ARG	L	18	43.993	38.088	1.192	1.00	35.47
ATOM	5044	N	ALA	L	19	45.271	42.833	6.886	1.00	10.65
ATOM	5045	CA	ALA	L	19	46.682	42.967	7.078	1.00	9.07
ATOM	5046	C	ALA	L	19	47.326	41.615	6.948	1.00	12.61
ATOM	5047	O	ALA	L	19	46.799	40.611	7.456	1.00	9.23
ATOM	5048	CB	ALA	L	19	46.947	43.551	8.451	1.00	5.55
ATOM	5049	N	THR	L	20	48.478	41.589	6.274	1.00	15.43
ATOM	5050	CA	THR	L	20	49.212	40.343	6.120	1.00	12.28
ATOM	5051	C	THR	L	20	50.730	40.584	6.352	1.00	11.21
ATOM	5052	O	THR	L	20	51.339	41.396	5.693	1.00	17.14
ATOM	5053	CB	THR	L	20	48.943	39.758	4.763	1.00	4.13
ATOM	5054	OG1	THR	L	20	50.111	39.875	3.995	1.00	17.20
ATOM	5055	CG2	THR	L	20	47.961	40.551	4.017	1.00	5.25
ATOM	5056	N	ILE	L	21	51.289	39.934	7.364	1.00	9.66
ATOM	5057	CA	ILE	L	21	52.697	40.023	7.747	1.00	12.49
ATOM	5058	C	ILE	L	21	53.409	38.851	7.067	1.00	17.65
ATOM	5059	O	ILE	L	21	52.761	37.853	6.698	1.00	23.64
ATOM	5060	CB	ILE	L	21	52.858	39.764	9.219	1.00	13.92
ATOM	5061	CG1	ILE	L	21	52.169	40.833	10.004	1.00	7.29
ATOM	5062	CG2	ILE	L	21	54.347	39.580	9.589	1.00	17.38
ATOM	5063	CD1	ILE	L	21	51.715	40.206	11.305	1.00	17.50
ATOM	5064	N	SER	L	22	54.735	38.922	6.959	1.00	13.91
ATOM	5065	CA	SER	L	22	55.457	37.863	6.281	1.00	6.93
ATOM	5066	C	SER	L	22	56.689	37.581	7.053	1.00	3.62
ATOM	5067	O	SER	L	22	57.282	38.483	7.629	1.00	5.96
ATOM	5068	CB	SER	L	22	55.837	38.322	4.918	1.00	4.60
ATOM	5069	OG	SER	L	22	56.921	39.201	5.119	1.00	26.84
ATOM	5070	N	CYS	L	23	57.079	36.321	7.051	1.00	2.80
ATOM	5071	CA	CYS	L	23	58.208	35.858	7.822	1.00	8.05
ATOM	5072	C	CYS	L	23	59.225	35.297	6.891	1.00	16.48
ATOM	5073	O	CYS	L	23	58.900	34.942	5.745	1.00	19.04
ATOM	5074	CB	CYS	L	23	57.735	34.767	8.761	1.00	7.37
ATOM	5075	SG	CYS	L	23	58.978	34.045	9.875	1.00	13.30
ATOM	5076	N	ARG	L	24	60.444	35.132	7.400	1.00	22.13
ATOM	5077	CA	ARG	L	24	61.507	34.638	6.547	1.00	20.26
ATOM	5078	C	ARG	L	24	62.599	33.764	7.087	1.00	21.29
ATOM	5079	O	ARG	L	24	63.380	34.198	7.933	1.00	23.81
ATOM	5080	CB	ARG	L	24	62.137	35.800	5.923	1.00	20.04
ATOM	5081	CG	ARG	L	24	61.885	35.752	4.516	1.00	19.68
ATOM	5082	CD	ARG	L	24	63.108	36.156	3.856	1.00	14.74
ATOM	5083	NE	ARG	L	24	63.005	35.431	2.670	1.00	12.59
ATOM	5084	CZ	ARG	L	24	62.571	35.960	1.562	1.00	19.71
ATOM	5085	NH1	ARG	L	24	62.194	37.260	1.508	1.00	2.00
ATOM	5086	NH2	ARG	L	24	62.471	35.113	0.546	1.00	26.73
ATOM	5087	N	ALA	L	25	62.693	32.549	6.565	1.00	19.31
ATOM	5088	CA	ALA	L	25	63.702	31.632	7.063	1.00	20.19
ATOM	5089	C	ALA	L	25	65.016	31.691	6.313	1.00	16.95
ATOM	5090	O	ALA	L	25	65.047	31.708	5.059	1.00	9.27
ATOM	5091	CB	ALA	L	25	63.161	30.202	7.064	1.00	22.08
ATOM	5092	N	SER	L	26	66.099	31.690	7.098	1.00	14.28
ATOM	5093	CA	SER	L	26	67.437	31.730	6.525	1.00	13.68
ATOM	5094	C	SER	L	26	67.629	30.436	5.761	1.00	11.94
ATOM	5095	O	SER	L	26	68.622	30.261	5.096	1.00	16.75
ATOM	5096	CB	SER	L	26	68.536	31.877	7.586	1.00	11.81
ATOM	5097	OG	SER	L	26	68.217	31.203	8.776	1.00	19.04
ATOM	5098	N	GLN	L	27	66.666	29.535	5.857	1.00	10.51

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ATOM	5099	CA	GLN	L	27	66.708	28.263	5.132	1.00	12.90
ATOM	5100	C	GLN	L	27	65.311	27.663	5.072	1.00	13.76
ATOM	5101	O	GLN	L	27	64.457	27.997	5.877	1.00	18.14
ATOM	5102	CB	GLN	L	27	67.640	27.278	5.806	1.00	10.99
ATOM	5103	CG	GLN	L	27	67.199	26.872	7.154	1.00	17.93
ATOM	5104	CD	GLN	L	27	68.103	25.822	7.765	1.00	20.49
ATOM	5105	OE1	GLN	L	27	69.127	26.130	8.396	1.00	17.17
ATOM	5106	NE2	GLN	L	27	67.712	24.567	7.601	1.00	21.57
ATOM	5107	N	ARG	L	28	65.059	26.776	4.131	1.00	10.25
ATOM	5108	CA	ARG	L	28	63.735	26.200	4.052	1.00	12.67
ATOM	5109	C	ARG	L	28	63.463	25.541	5.412	1.00	18.66
ATOM	5110	O	ARG	L	28	64.410	25.089	6.099	1.00	24.62
ATOM	5111	CB	ARG	L	28	63.696	25.109	2.991	1.00	15.57
ATOM	5112	CG	ARG	L	28	63.566	25.573	1.560	1.00	28.33
ATOM	5113	CD	ARG	L	28	63.538	24.363	0.595	1.00	40.54
ATOM	5114	NE	ARG	L	28	63.498	24.764	-0.819	1.00	51.53
ATOM	5115	CZ	ARG	L	28	62.382	24.841	-1.553	1.00	54.66
ATOM	5116	NH1	ARG	L	28	61.200	24.542	-1.006	1.00	56.72
ATOM	5117	NH2	ARG	L	28	62.441	25.228	-2.830	1.00	51.53
ATOM	5118	N	VAL	L	29	62.189	25.472	5.802	1.00	14.28
ATOM	5119	CA	VAL	L	29	61.835	24.801	7.035	1.00	9.03
ATOM	5120	C	VAL	L	29	60.550	24.078	6.790	1.00	10.86
ATOM	5121	O	VAL	L	29	59.814	23.748	7.717	1.00	15.68
ATOM	5122	CB	VAL	L	29	61.643	25.756	8.187	1.00	5.01
ATOM	5123	CG1	VAL	L	29	62.958	26.359	8.514	1.00	13.48
ATOM	5124	CG2	VAL	L	29	60.635	26.829	7.851	1.00	2.00
ATOM	5125	N	SER	L	30	60.264	23.832	5.528	1.00	6.69
ATOM	5126	CA	SER	L	30	59.046	23.143	5.183	1.00	6.97
ATOM	5127	C	SER	L	30	59.462	21.901	4.448	1.00	5.68
ATOM	5128	O	SER	L	30	60.179	21.983	3.486	1.00	17.15
ATOM	5129	CB	SER	L	30	58.230	24.006	4.242	1.00	10.67
ATOM	5130	OG	SER	L	30	57.902	23.245	3.080	1.00	13.20
ATOM	5131	N	SER	L	31	59.023	20.744	4.858	1.00	2.00
ATOM	5132	CA	SER	L	31	59.448	19.607	4.128	1.00	6.03
ATOM	5133	C	SER	L	31	58.311	19.071	3.290	1.00	8.46
ATOM	5134	O	SER	L	31	57.522	19.883	2.825	1.00	11.25
ATOM	5135	CB	SER	L	31	60.023	18.602	5.082	1.00	6.72
ATOM	5136	OG	SER	L	31	58.985	17.966	5.753	1.00	24.05
ATOM	5137	N	SER	L	32	58.220	17.750	3.076	1.00	12.34
ATOM	5138	CA	SER	L	32	57.183	17.184	2.189	1.00	13.27
ATOM	5139	C	SER	L	32	55.773	17.116	2.643	1.00	14.25
ATOM	5140	O	SER	L	32	54.920	16.769	1.861	1.00	15.86
ATOM	5141	CB	SER	L	32	57.539	15.779	1.664	1.00	14.67
ATOM	5142	OG	SER	L	32	57.338	14.809	2.668	1.00	11.90
ATOM	5143	N	THR	L	33	55.488	17.392	3.898	1.00	19.09
ATOM	5144	CA	THR	L	33	54.087	17.365	4.280	1.00	21.21
ATOM	5145	C	THR	L	33	53.743	18.540	5.139	1.00	24.15
ATOM	5146	O	THR	L	33	52.610	18.989	5.116	1.00	27.26
ATOM	5147	CB	THR	L	33	53.730	16.137	5.066	1.00	19.81
ATOM	5148	OG1	THR	L	33	54.623	15.089	4.727	1.00	32.56
ATOM	5149	CG2	THR	L	33	52.392	15.683	4.729	1.00	24.22
ATOM	5150	N	TYR	L	34	54.709	19.029	5.918	1.00	24.64
ATOM	5151	CA	TYR	L	34	54.455	20.160	6.801	1.00	23.56
ATOM	5152	C	TYR	L	34	55.511	21.251	6.702	1.00	21.89
ATOM	5153	O	TYR	L	34	56.608	21.027	6.213	1.00	26.30
ATOM	5154	CB	TYR	L	34	54.395	19.681	8.241	1.00	25.52
ATOM	5155	CG	TYR	L	34	53.398	18.581	8.490	1.00	28.65
ATOM	5156	CD1	TYR	L	34	53.304	17.503	7.633	1.00	30.66
ATOM	5157	CD2	TYR	L	34	52.558	18.608	9.618	1.00	35.43
ATOM	5158	CE1	TYR	L	34	52.409	16.473	7.871	1.00	38.76

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ATOM	5159	CE2	TYR	L	34	51.646	17.573	9.882	1.00	35.88
ATOM	5160	CZ	TYR	L	34	51.584	16.507	8.992	1.00	41.39
ATOM	5161	OH	TYR	L	34	50.723	15.448	9.165	1.00	48.94
ATOM	5162	N	SER	L	35	55.170	22.437	7.169	1.00	13.97
ATOM	5163	CA	SER	L	35	56.093	23.534	7.170	1.00	13.32
ATOM	5164	C	SER	L	35	56.193	23.795	8.645	1.00	13.45
ATOM	5165	O	SER	L	35	55.211	24.173	9.237	1.00	15.74
ATOM	5166	CB	SER	L	35	55.456	24.728	6.489	1.00	15.62
ATOM	5167	OG	SER	L	35	55.094	24.419	5.151	1.00	28.46
ATOM	5168	N	TYR	L	36	57.363	23.671	9.250	1.00	11.93
ATOM	5169	CA	TYR	L	36	57.445	23.881	10.689	1.00	8.44
ATOM	5170	C	TYR	L	36	57.511	25.344	11.140	1.00	13.41
ATOM	5171	O	TYR	L	36	58.470	25.758	11.805	1.00	17.14
ATOM	5172	CB	TYR	L	36	58.625	23.098	11.191	1.00	6.00
ATOM	5173	CG	TYR	L	36	58.297	21.638	11.074	1.00	7.38
ATOM	5174	CD1	TYR	L	36	57.964	20.890	12.196	1.00	5.84
ATOM	5175	CD2	TYR	L	36	58.237	21.018	9.836	1.00	3.43
ATOM	5176	CE1	TYR	L	36	57.581	19.559	12.089	1.00	5.27
ATOM	5177	CE2	TYR	L	36	57.863	19.700	9.722	1.00	2.00
ATOM	5178	CZ	TYR	L	36	57.539	18.975	10.847	1.00	5.53
ATOM	5179	OH	TYR	L	36	57.196	17.649	10.718	1.00	12.18
ATOM	5180	N	MET	L	37	56.482	26.112	10.775	1.00	11.86
ATOM	5181	CA	MET	L	37	56.377	27.530	11.111	1.00	10.43
ATOM	5182	C	MET	L	37	55.106	27.780	11.962	1.00	9.37
ATOM	5183	O	MET	L	37	54.050	27.171	11.758	1.00	5.92
ATOM	5184	CB	MET	L	37	56.309	28.380	9.808	1.00	10.36
ATOM	5185	CG	MET	L	37	57.577	29.105	9.360	1.00	8.70
ATOM	5186	SD	MET	L	37	58.310	30.089	10.671	1.00	18.45
ATOM	5187	CE	MET	L	37	59.527	30.885	9.837	1.00	23.14
ATOM	5188	N	HIS	L	38	55.199	28.683	12.922	1.00	10.35
ATOM	5189	CA	HIS	L	38	54.026	29.016	13.735	1.00	11.62
ATOM	5190	C	HIS	L	38	54.008	30.495	14.020	1.00	14.37
ATOM	5191	O	HIS	L	38	55.058	31.147	14.077	1.00	15.85
ATOM	5192	CB	HIS	L	38	54.060	28.275	15.033	1.00	5.05
ATOM	5193	CG	HIS	L	38	54.685	26.946	14.901	1.00	4.42
ATOM	5194	ND1	HIS	L	38	53.997	25.862	14.410	1.00	9.28
ATOM	5195	CD2	HIS	L	38	55.949	26.532	15.116	1.00	6.25
ATOM	5196	CE1	HIS	L	38	54.814	24.831	14.319	1.00	11.20
ATOM	5197	NE2	HIS	L	38	56.009	25.214	14.744	1.00	12.56
ATOM	5198	N	TRP	L	39	52.817	31.023	14.229	1.00	12.16
ATOM	5199	CA	TRP	L	39	52.702	32.435	14.497	1.00	12.72
ATOM	5200	C	TRP	L	39	52.079	32.753	15.848	1.00	8.81
ATOM	5201	O	TRP	L	39	51.214	32.027	16.330	1.00	12.08
ATOM	5202	CB	TRP	L	39	51.889	33.068	13.402	1.00	14.02
ATOM	5203	CG	TRP	L	39	52.474	32.985	12.059	1.00	3.77
ATOM	5204	CD1	TRP	L	39	52.177	32.063	11.116	1.00	2.00
ATOM	5205	CD2	TRP	L	39	53.157	34.028	11.392	1.00	2.00
ATOM	5206	NE1	TRP	L	39	52.591	32.478	9.885	1.00	2.00
ATOM	5207	CE2	TRP	L	39	53.200	33.694	10.025	1.00	2.00
ATOM	5208	CE3	TRP	L	39	53.731	35.237	11.817	1.00	7.31
ATOM	5209	CZ2	TRP	L	39	53.787	34.513	9.065	1.00	5.17
ATOM	5210	CZ3	TRP	L	39	54.323	36.069	10.860	1.00	10.45
ATOM	5211	CH2	TRP	L	39	54.341	35.697	9.492	1.00	11.48
ATOM	5212	N	TYR	L	40	52.559	33.823	16.465	1.00	4.39
ATOM	5213	CA	TYR	L	40	52.068	34.258	17.754	1.00	5.10
ATOM	5214	C	TYR	L	40	51.747	35.731	17.713	1.00	7.99
ATOM	5215	O	TYR	L	40	52.329	36.493	16.937	1.00	8.11
ATOM	5216	CB	TYR	L	40	53.117	34.003	18.833	1.00	2.00
ATOM	5217	CG	TYR	L	40	53.556	32.572	18.877	1.00	2.00
ATOM	5218	CD1	TYR	L	40	53.424	31.800	20.025	1.00	5.44

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ATOM	5219	CD2	TYR	L	40	54.178	32.009	17.786	1.00	7.70
ATOM	5220	CE1	TYR	L	40	53.924	30.487	20.079	1.00	12.12
ATOM	5221	CE2	TYR	L	40	54.676	30.718	17.821	1.00	12.50
ATOM	5222	CZ	TYR	L	40	54.552	29.954	18.972	1.00	12.40
ATOM	5223	OH	TYR	L	40	55.038	28.657	19.015	1.00	14.41
ATOM	5224	N	GLN	L	41	50.764	36.139	18.498	1.00	7.39
ATOM	5225	CA	GLN	L	41	50.489	37.556	18.569	1.00	8.60
ATOM	5226	C	GLN	L	41	50.874	37.763	20.018	1.00	5.74
ATOM	5227	O	GLN	L	41	50.814	36.787	20.798	1.00	4.20
ATOM	5228	CB	GLN	L	41	49.009	37.836	18.369	1.00	14.63
ATOM	5229	CG	GLN	L	41	48.228	37.804	19.670	1.00	22.31
ATOM	5230	CD	GLN	L	41	46.959	38.553	19.592	1.00	23.09
ATOM	5231	OE1	GLN	L	41	46.702	39.248	18.616	1.00	28.42
ATOM	5232	NE2	GLN	L	41	46.132	38.414	20.615	1.00	30.08
ATOM	5233	N	GLN	L	42	51.347	38.958	20.368	1.00	2.00
ATOM	5234	CA	GLN	L	42	51.661	39.215	21.758	1.00	6.57
ATOM	5235	C	GLN	L	42	51.314	40.622	22.074	1.00	11.43
ATOM	5236	O	GLN	L	42	51.764	41.518	21.375	1.00	9.78
ATOM	5237	CB	GLN	L	42	53.123	39.015	22.088	1.00	6.01
ATOM	5238	CG	GLN	L	42	53.593	39.824	23.295	1.00	7.29
ATOM	5239	CD	GLN	L	42	54.961	39.383	23.802	1.00	13.57
ATOM	5240	OE1	GLN	L	42	55.985	39.565	23.103	1.00	11.87
ATOM	5241	NE2	GLN	L	42	55.004	38.808	25.025	1.00	12.24
ATOM	5242	N	LYS	L	43	50.517	40.799	23.142	1.00	20.07
ATOM	5243	CA	LYS	L	43	50.082	42.118	23.614	1.00	16.37
ATOM	5244	C	LYS	L	43	51.071	42.657	24.654	1.00	16.94
ATOM	5245	O	LYS	L	43	51.849	41.933	25.274	1.00	17.41
ATOM	5246	CB	LYS	L	43	48.687	42.047	24.228	1.00	11.37
ATOM	5247	CG	LYS	L	43	47.654	41.425	23.354	1.00	7.30
ATOM	5248	CD	LYS	L	43	47.044	42.486	22.502	1.00	4.14
ATOM	5249	CE	LYS	L	43	45.570	42.195	22.216	1.00	14.56
ATOM	5250	NZ	LYS	L	43	45.164	40.836	21.657	1.00	15.12
ATOM	5251	N	PRO	L	44	51.032	43.950	24.879	1.00	16.08
ATOM	5252	CA	PRO	L	44	51.958	44.523	25.855	1.00	20.14
ATOM	5253	C	PRO	L	44	51.678	43.910	27.197	1.00	21.90
ATOM	5254	O	PRO	L	44	50.535	43.661	27.486	1.00	29.38
ATOM	5255	CB	PRO	L	44	51.621	45.999	25.839	1.00	16.67
ATOM	5256	CG	PRO	L	44	50.889	46.193	24.594	1.00	20.76
ATOM	5257	CD	PRO	L	44	50.129	44.948	24.321	1.00	16.80
ATOM	5258	N	GLY	L	45	52.701	43.636	27.996	1.00	19.42
ATOM	5259	CA	GLY	L	45	52.483	43.062	29.308	1.00	19.69
ATOM	5260	C	GLY	L	45	52.182	41.571	29.297	1.00	23.93
ATOM	5261	O	GLY	L	45	52.481	40.874	30.262	1.00	25.74
ATOM	5262	N	GLN	L	46	51.615	41.061	28.208	1.00	25.03
ATOM	5263	CA	GLN	L	46	51.257	39.647	28.146	1.00	30.28
ATOM	5264	C	GLN	L	46	52.230	38.759	27.378	1.00	26.33
ATOM	5265	O	GLN	L	46	53.068	39.250	26.653	1.00	32.91
ATOM	5266	CB	GLN	L	46	49.859	39.515	27.550	1.00	37.06
ATOM	5267	CG	GLN	L	46	48.981	40.717	27.787	1.00	42.85
ATOM	5268	CD	GLN	L	46	47.530	40.327	27.945	1.00	49.56
ATOM	5269	OE1	GLN	L	46	46.885	39.898	26.988	1.00	51.85
ATOM	5270	NE2	GLN	L	46	47.005	40.469	29.161	1.00	56.29
ATOM	5271	N	PRO	L	47	52.135	37.437	27.536	1.00	18.48
ATOM	5272	CA	PRO	L	47	53.051	36.573	26.817	1.00	19.31
ATOM	5273	C	PRO	L	47	52.391	36.277	25.495	1.00	21.39
ATOM	5274	O	PRO	L	47	51.224	36.588	25.330	1.00	26.66
ATOM	5275	CB	PRO	L	47	53.123	35.340	27.710	1.00	23.50
ATOM	5276	CG	PRO	L	47	51.892	35.373	28.540	1.00	16.21
ATOM	5277	CD	PRO	L	47	51.199	36.658	28.351	1.00	16.86
ATOM	5278	N	PRO	L	48	53.132	35.717	24.525	1.00	19.72

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ATOM	5279	CA	PRO	L	48	52.603	35.363	23.202	1.00	16.48
ATOM	5280	C	PRO	L	48	51.416	34.388	23.324	1.00	14.75
ATOM	5281	O	PRO	L	48	51.314	33.627	24.291	1.00	16.65
ATOM	5282	CB	PRO	L	48	53.771	34.662	22.527	1.00	19.03
ATOM	5283	CG	PRO	L	48	54.957	35.158	23.214	1.00	21.74
ATOM	5284	CD	PRO	L	48	54.560	35.403	24.637	1.00	21.08
ATOM	5285	N	LYS	L	49	50.535	34.411	22.330	1.00	9.25
ATOM	5286	CA	LYS	L	49	49.362	33.552	22.285	1.00	6.69
ATOM	5287	C	LYS	L	49	49.464	32.920	20.932	1.00	5.48
ATOM	5288	O	LYS	L	49	49.552	33.614	19.910	1.00	3.74
ATOM	5289	CB	LYS	L	49	48.089	34.404	22.363	1.00	12.07
ATOM	5290	CG	LYS	L	49	46.747	33.661	22.505	1.00	15.77
ATOM	5291	CD	LYS	L	49	46.214	33.046	21.201	1.00	20.20
ATOM	5292	CE	LYS	L	49	45.676	31.610	21.462	1.00	27.38
ATOM	5293	NZ	LYS	L	49	46.673	30.466	21.467	1.00	22.17
ATOM	5294	N	LEU	L	50	49.397	31.604	20.901	1.00	5.72
ATOM	5295	CA	LEU	L	50	49.542	30.915	19.628	1.00	5.67
ATOM	5296	C	LEU	L	50	48.363	31.164	18.751	1.00	6.25
ATOM	5297	O	LEU	L	50	47.244	30.975	19.182	1.00	16.43
ATOM	5298	CB	LEU	L	50	49.670	29.401	19.851	1.00	2.00
ATOM	5299	CG	LEU	L	50	49.345	28.473	18.685	1.00	2.00
ATOM	5300	CD1	LEU	L	50	49.900	29.016	17.366	1.00	2.05
ATOM	5301	CD2	LEU	L	50	49.918	27.121	19.016	1.00	2.00
ATOM	5302	N	LEU	L	51	48.591	31.560	17.514	1.00	3.42
ATOM	5303	CA	LEU	L	51	47.474	31.724	16.619	1.00	2.00
ATOM	5304	C	LEU	L	51	47.502	30.629	15.570	1.00	2.00
ATOM	5305	O	LEU	L	51	46.547	29.877	15.428	1.00	4.60
ATOM	5306	CB	LEU	L	51	47.526	33.041	15.914	1.00	2.00
ATOM	5307	CG	LEU	L	51	47.001	34.186	16.738	1.00	7.08
ATOM	5308	CD1	LEU	L	51	48.020	35.302	16.730	1.00	12.05
ATOM	5309	CD2	LEU	L	51	45.709	34.677	16.133	1.00	3.81
ATOM	5310	N	ILE	L	52	48.617	30.503	14.861	1.00	3.04
ATOM	5311	CA	ILE	L	52	48.690	29.511	13.810	1.00	6.07
ATOM	5312	C	ILE	L	52	49.870	28.582	14.015	1.00	9.00
ATOM	5313	O	ILE	L	52	50.925	29.018	14.507	1.00	12.24
ATOM	5314	CB	ILE	L	52	48.741	30.177	12.445	1.00	2.95
ATOM	5315	CG1	ILE	L	52	47.394	30.877	12.205	1.00	8.27
ATOM	5316	CG2	ILE	L	52	49.003	29.126	11.378	1.00	2.00
ATOM	5317	CD1	ILE	L	52	47.442	32.115	11.350	1.00	5.99
ATOM	5318	N	LYS	L	53	49.670	27.290	13.729	1.00	6.06
ATOM	5319	CA	LYS	L	53	50.746	26.314	13.886	1.00	11.71
ATOM	5320	C	LYS	L	53	50.924	25.583	12.587	1.00	13.09
ATOM	5321	O	LYS	L	53	49.952	25.329	11.892	1.00	16.93
ATOM	5322	CB	LYS	L	53	50.419	25.313	14.977	1.00	12.25
ATOM	5323	CG	LYS	L	53	49.235	24.452	14.633	1.00	23.29
ATOM	5324	CD	LYS	L	53	48.302	24.306	15.827	1.00	27.05
ATOM	5325	CE	LYS	L	53	48.817	23.253	16.818	1.00	25.73
ATOM	5326	NZ	LYS	L	53	47.692	22.443	17.324	1.00	27.44
ATOM	5327	N	TYR	L	54	52.165	25.226	12.280	1.00	10.74
ATOM	5328	CA	TYR	L	54	52.482	24.554	11.044	1.00	5.10
ATOM	5329	C	TYR	L	54	52.071	25.387	9.847	1.00	2.74
ATOM	5330	O	TYR	L	54	51.413	24.908	8.928	1.00	2.00
ATOM	5331	CB	TYR	L	54	51.847	23.173	11.004	1.00	4.97
ATOM	5332	CG	TYR	L	54	52.260	22.321	12.186	1.00	10.42
ATOM	5333	CD1	TYR	L	54	51.633	22.485	13.413	1.00	8.86
ATOM	5334	CD2	TYR	L	54	53.314	21.392	12.094	1.00	6.88
ATOM	5335	CE1	TYR	L	54	52.041	21.757	14.518	1.00	11.69
ATOM	5336	CE2	TYR	L	54	53.729	20.653	13.202	1.00	4.24
ATOM	5337	CZ	TYR	L	54	53.092	20.842	14.407	1.00	4.81
ATOM	5338	OH	TYR	L	54	53.476	20.135	15.528	1.00	8.19

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ATOM	5339	N	ALA	L	55	52.484	26.648	9.874	1.00	2.00
ATOM	5340	CA	ALA	L	55	52.249	27.538	8.765	1.00	3.58
ATOM	5341	C	ALA	L	55	50.838	27.864	8.367	1.00	8.56
ATOM	5342	O	ALA	L	55	50.550	28.985	7.922	1.00	10.89
ATOM	5343	CB	ALA	L	55	52.938	26.978	7.578	1.00	12.22
ATOM	5344	N	SER	L	56	49.937	26.905	8.513	1.00	9.04
ATOM	5345	CA	SER	L	56	48.592	27.193	8.075	1.00	7.89
ATOM	5346	C	SER	L	56	47.393	26.699	8.869	1.00	7.19
ATOM	5347	O	SER	L	56	46.273	26.985	8.480	1.00	9.14
ATOM	5348	CB	SER	L	56	48.412	26.761	6.636	1.00	5.70
ATOM	5349	OG	SER	L	56	47.728	25.532	6.624	1.00	7.03
ATOM	5350	N	ASN	L	57	47.576	26.010	9.983	1.00	7.47
ATOM	5351	CA	ASN	L	57	46.406	25.557	10.752	1.00	11.60
ATOM	5352	C	ASN	L	57	46.199	26.411	11.965	1.00	11.89
ATOM	5353	O	ASN	L	57	47.144	26.597	12.746	1.00	12.27
ATOM	5354	CB	ASN	L	57	46.577	24.129	11.216	1.00	17.33
ATOM	5355	CG	ASN	L	57	47.516	23.380	10.340	1.00	29.60
ATOM	5356	OD1	ASN	L	57	47.227	23.128	9.161	1.00	35.96
ATOM	5357	ND2	ASN	L	57	48.675	23.037	10.889	1.00	37.41
ATOM	5358	N	LEU	L	58	44.961	26.908	12.110	1.00	10.44
ATOM	5359	CA	LEU	L	58	44.567	27.763	13.215	1.00	4.65
ATOM	5360	C	LEU	L	58	44.662	26.959	14.482	1.00	6.24
ATOM	5361	O	LEU	L	58	44.309	25.777	14.522	1.00	8.31
ATOM	5362	CB	LEU	L	58	43.140	28.243	13.000	1.00	3.90
ATOM	5363	CG	LEU	L	58	43.004	29.669	12.494	1.00	6.17
ATOM	5364	CD1	LEU	L	58	42.304	29.675	11.149	1.00	8.67
ATOM	5365	CD2	LEU	L	58	42.217	30.457	13.483	1.00	7.99
ATOM	5366	N	GLU	L	59	45.201	27.578	15.512	1.00	7.88
ATOM	5367	CA	GLU	L	59	45.303	26.897	16.791	1.00	10.86
ATOM	5368	C	GLU	L	59	43.864	26.822	17.267	1.00	13.98
ATOM	5369	O	GLU	L	59	43.000	27.580	16.785	1.00	15.12
ATOM	5370	CB	GLU	L	59	46.120	27.735	17.785	1.00	6.90
ATOM	5371	CG	GLU	L	59	45.903	27.345	19.221	1.00	3.53
ATOM	5372	CD	GLU	L	59	46.397	25.949	19.472	1.00	8.01
ATOM	5373	OE1	GLU	L	59	46.908	25.666	20.579	1.00	12.33
ATOM	5374	OE2	GLU	L	59	46.280	25.129	18.545	1.00	12.63
ATOM	5375	N	SER	L	60	43.581	25.967	18.232	1.00	16.88
ATOM	5376	CA	SER	L	60	42.203	25.923	18.691	1.00	26.81
ATOM	5377	C	SER	L	60	41.798	27.211	19.425	1.00	27.08
ATOM	5378	O	SER	L	60	42.481	27.662	20.354	1.00	30.34
ATOM	5379	CB	SER	L	60	41.951	24.729	19.605	1.00	34.24
ATOM	5380	OG	SER	L	60	40.704	24.130	19.268	1.00	48.27
ATOM	5381	N	GLY	L	61	40.684	27.811	19.001	1.00	27.36
ATOM	5382	CA	GLY	L	61	40.226	29.024	19.658	1.00	26.30
ATOM	5383	C	GLY	L	61	40.559	30.292	18.915	1.00	27.58
ATOM	5384	O	GLY	L	61	39.937	31.330	19.128	1.00	33.06
ATOM	5385	N	VAL	L	62	41.548	30.235	18.041	1.00	22.80
ATOM	5386	CA	VAL	L	62	41.855	31.422	17.308	1.00	14.94
ATOM	5387	C	VAL	L	62	40.688	31.640	16.356	1.00	10.83
ATOM	5388	O	VAL	L	62	40.145	30.704	15.775	1.00	12.67
ATOM	5389	CB	VAL	L	62	43.131	31.251	16.504	1.00	17.87
ATOM	5390	CG1	VAL	L	62	43.406	32.522	15.620	1.00	15.26
ATOM	5391	CG2	VAL	L	62	44.255	30.963	17.458	1.00	19.17
ATOM	5392	N	PRO	L	63	40.261	32.880	16.222	1.00	2.00
ATOM	5393	CA	PRO	L	63	39.174	33.299	15.354	1.00	2.00
ATOM	5394	C	PRO	L	63	39.552	33.081	13.881	1.00	7.37
ATOM	5395	O	PRO	L	63	40.711	33.224	13.499	1.00	13.88
ATOM	5396	CB	PRO	L	63	39.043	34.765	15.664	1.00	2.00
ATOM	5397	CG	PRO	L	63	39.770	34.947	16.982	1.00	2.00
ATOM	5398	CD	PRO	L	63	40.836	33.991	16.978	1.00	3.25



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ATOM	5399	N	ALA	L	64	38.569	32.821	13.035	1.00	7.85
ATOM	5400	CA	ALA	L	64	38.831	32.571	11.623	1.00	4.65
ATOM	5401	C	ALA	L	64	39.453	33.687	10.803	1.00	7.99
ATOM	5402	O	ALA	L	64	39.864	33.418	9.688	1.00	10.79
ATOM	5403	CB	ALA	L	64	37.568	32.138	10.940	1.00	2.00
ATOM	5404	N	ARG	L	65	39.483	34.939	11.270	1.00	11.51
ATOM	5405	CA	ARG	L	65	40.088	35.966	10.407	1.00	14.72
ATOM	5406	C	ARG	L	65	41.506	35.560	10.174	1.00	16.81
ATOM	5407	O	ARG	L	65	41.989	35.593	9.025	1.00	19.51
ATOM	5408	CB	ARG	L	65	40.096	37.371	11.018	1.00	16.63
ATOM	5409	CG	ARG	L	65	39.542	37.522	12.421	1.00	18.86
ATOM	5410	CD	ARG	L	65	39.445	39.019	12.712	1.00	18.52
ATOM	5411	NE	ARG	L	65	39.972	39.412	14.015	1.00	12.94
ATOM	5412	CZ	ARG	L	65	39.525	38.923	15.156	1.00	2.67
ATOM	5413	NH1	ARG	L	65	38.540	38.044	15.128	1.00	10.37
ATOM	5414	NH2	ARG	L	65	40.013	39.349	16.306	1.00	2.00
ATOM	5415	N	PHE	L	66	42.135	35.123	11.275	1.00	14.02
ATOM	5416	CA	PHE	L	66	43.520	34.677	11.282	1.00	8.45
ATOM	5417	C	PHE	L	66	43.706	33.496	10.392	1.00	8.17
ATOM	5418	O	PHE	L	66	42.994	32.493	10.494	1.00	9.95
ATOM	5419	CB	PHE	L	66	43.948	34.252	12.655	1.00	8.44
ATOM	5420	CG	PHE	L	66	44.058	35.362	13.572	1.00	5.24
ATOM	5421	CD1	PHE	L	66	45.087	36.270	13.424	1.00	2.00
ATOM	5422	CD2	PHE	L	66	43.074	35.573	14.525	1.00	6.51
ATOM	5423	CE1	PHE	L	66	45.155	37.413	14.208	1.00	12.79
ATOM	5424	CE2	PHE	L	66	43.111	36.710	15.324	1.00	13.33
ATOM	5425	CZ	PHE	L	66	44.165	37.650	15.164	1.00	17.39
ATOM	5426	N	SER	L	67	44.722	33.606	9.559	1.00	7.28
ATOM	5427	CA	SER	L	67	45.044	32.566	8.634	1.00	6.50
ATOM	5428	C	SER	L	67	46.544	32.712	8.335	1.00	5.77
ATOM	5429	O	SER	L	67	47.158	33.736	8.676	1.00	4.14
ATOM	5430	CB	SER	L	67	44.165	32.701	7.402	1.00	2.00
ATOM	5431	OG	SER	L	67	44.861	33.380	6.406	1.00	12.93
ATOM	5432	N	GLY	L	68	47.130	31.665	7.757	1.00	8.60
ATOM	5433	CA	GLY	L	68	48.548	31.656	7.427	1.00	13.42
ATOM	5434	C	GLY	L	68	48.946	30.739	6.267	1.00	17.60
ATOM	5435	O	GLY	L	68	48.425	29.618	6.125	1.00	17.28
ATOM	5436	N	SER	L	69	49.886	31.198	5.438	1.00	20.35
ATOM	5437	CA	SER	L	69	50.352	30.372	4.324	1.00	18.53
ATOM	5438	C	SER	L	69	51.871	30.504	4.112	1.00	19.39
ATOM	5439	O	SER	L	69	52.556	31.239	4.841	1.00	22.79
ATOM	5440	CB	SER	L	69	49.614	30.724	3.040	1.00	9.10
ATOM	5441	OG	SER	L	69	50.537	31.296	2.142	1.00	20.65
ATOM	5442	N	GLY	L	70	52.394	29.777	3.119	1.00	18.72
ATOM	5443	CA	GLY	L	70	53.809	29.839	2.827	1.00	13.60
ATOM	5444	C	GLY	L	70	54.396	28.470	2.770	1.00	12.78
ATOM	5445	O	GLY	L	70	53.669	27.522	2.874	1.00	15.99
ATOM	5446	N	SER	L	71	55.714	28.377	2.625	1.00	18.45
ATOM	5447	CA	SER	L	71	56.443	27.099	2.517	1.00	12.87
ATOM	5448	C	SER	L	71	57.915	27.400	2.259	1.00	14.03
ATOM	5449	O	SER	L	71	58.298	28.482	1.776	1.00	14.83
ATOM	5450	CB	SER	L	71	55.969	26.264	1.341	1.00	8.79
ATOM	5451	OG	SER	L	71	56.425	26.866	0.143	1.00	5.44
ATOM	5452	N	GLY	L	72	58.753	26.436	2.581	1.00	12.34
ATOM	5453	CA	GLY	L	72	60.153	26.672	2.380	1.00	13.90
ATOM	5454	C	GLY	L	72	60.704	27.761	3.283	1.00	14.12
ATOM	5455	O	GLY	L	72	60.986	27.507	4.463	1.00	13.61
ATOM	5456	N	THR	L	73	60.876	28.966	2.745	1.00	12.10
ATOM	5457	CA	THR	L	73	61.466	30.031	3.544	1.00	13.12
ATOM	5458	C	THR	L	73	60.649	31.264	3.750	1.00	12.99

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ATOM	5459	O	THR	L	73	61.070	32.181	4.493	1.00	13.61
ATOM	5460	CB	THR	L	73	62.784	30.474	2.933	1.00	14.11
ATOM	5461	OG1	THR	L	73	62.595	30.763	1.537	1.00	7.34
ATOM	5462	CG2	THR	L	73	63.788	29.388	3.105	1.00	13.79
ATOM	5463	N	ASP	L	74	59.497	31.297	3.086	1.00	12.75
ATOM	5464	CA	ASP	L	74	58.606	32.448	3.189	1.00	15.25
ATOM	5465	C	ASP	L	74	57.198	32.057	3.655	1.00	14.41
ATOM	5466	O	ASP	L	74	56.588	31.092	3.149	1.00	7.58
ATOM	5467	CB	ASP	L	74	58.536	33.204	1.848	1.00	16.77
ATOM	5468	CG	ASP	L	74	59.849	33.875	1.487	1.00	15.03
ATOM	5469	OD1	ASP	L	74	60.223	34.862	2.163	1.00	18.58
ATOM	5470	OD2	ASP	L	74	60.500	33.407	0.535	1.00	6.29
ATOM	5471	N	PHE	L	75	56.713	32.802	4.655	1.00	13.56
ATOM	5472	CA	PHE	L	75	55.398	32.559	5.213	1.00	9.48
ATOM	5473	C	PHE	L	75	54.727	33.853	5.532	1.00	11.42
ATOM	5474	O	PHE	L	75	55.373	34.862	5.803	1.00	13.28
ATOM	5475	CB	PHE	L	75	55.510	31.710	6.478	1.00	7.71
ATOM	5476	CG	PHE	L	75	56.196	30.401	6.242	1.00	7.70
ATOM	5477	CD1	PHE	L	75	57.578	30.270	6.416	1.00	8.15
ATOM	5478	CD2	PHE	L	75	55.484	29.340	5.710	1.00	5.35
ATOM	5479	CE1	PHE	L	75	58.224	29.110	6.045	1.00	5.69
ATOM	5480	CE2	PHE	L	75	56.110	28.184	5.342	1.00	3.41
ATOM	5481	CZ	PHE	L	75	57.481	28.063	5.503	1.00	9.76
ATOM	5482	N	THR	L	76	53.407	33.805	5.505	1.00	15.28
ATOM	5483	CA	THR	L	76	52.582	34.956	5.811	1.00	12.70
ATOM	5484	C	THR	L	76	51.531	34.543	6.835	1.00	12.23
ATOM	5485	O	THR	L	76	51.230	33.361	7.037	1.00	14.69
ATOM	5486	CB	THR	L	76	51.838	35.400	4.606	1.00	10.87
ATOM	5487	OG1	THR	L	76	51.244	34.237	4.009	1.00	15.93
ATOM	5488	CG2	THR	L	76	52.757	36.089	3.621	1.00	7.75
ATOM	5489	N	LEU	L	77	50.974	35.548	7.478	1.00	10.11
ATOM	5490	CA	LEU	L	77	49.938	35.372	8.468	1.00	6.41
ATOM	5491	C	LEU	L	77	48.998	36.515	8.146	1.00	5.30
ATOM	5492	O	LEU	L	77	49.435	37.657	8.057	1.00	6.82
ATOM	5493	CB	LEU	L	77	50.552	35.538	9.865	1.00	6.27
ATOM	5494	CG	LEU	L	77	49.631	35.736	11.058	1.00	4.19
ATOM	5495	CD1	LEU	L	77	49.417	37.252	11.309	1.00	2.00
ATOM	5496	CD2	LEU	L	77	48.341	34.973	10.765	1.00	6.56
ATOM	5497	N	THR	L	78	47.720	36.265	7.941	1.00	4.96
ATOM	5498	CA	THR	L	78	46.888	37.431	7.646	1.00	11.19
ATOM	5499	C	THR	L	78	45.494	37.433	8.214	1.00	11.38
ATOM	5500	O	THR	L	78	44.747	36.470	8.043	1.00	19.02
ATOM	5501	CB	THR	L	78	46.746	37.673	6.151	1.00	11.56
ATOM	5502	OG1	THR	L	78	45.346	37.816	5.814	1.00	10.69
ATOM	5503	CG2	THR	L	78	47.384	36.507	5.391	1.00	12.49
ATOM	5504	N	ILE	L	79	45.160	38.539	8.874	1.00	9.69
ATOM	5505	CA	ILE	L	79	43.853	38.779	9.479	1.00	5.35
ATOM	5506	C	ILE	L	79	42.948	39.252	8.351	1.00	2.47
ATOM	5507	O	ILE	L	79	43.264	40.231	7.710	1.00	7.75
ATOM	5508	CB	ILE	L	79	44.005	39.882	10.533	1.00	4.04
ATOM	5509	CG1	ILE	L	79	45.213	39.533	11.421	1.00	2.00
ATOM	5510	CG2	ILE	L	79	42.739	40.025	11.311	1.00	14.42
ATOM	5511	CD1	ILE	L	79	45.385	40.345	12.673	1.00	2.00
ATOM	5512	N	SER	L	80	41.814	38.611	8.100	1.00	5.46
ATOM	5513	CA	SER	L	80	40.980	39.064	6.961	1.00	9.15
ATOM	5514	C	SER	L	80	40.428	40.480	7.077	1.00	9.49
ATOM	5515	O	SER	L	80	40.164	41.121	6.066	1.00	17.07
ATOM	5516	CB	SER	L	80	39.812	38.107	6.650	1.00	8.10
ATOM	5517	OG	SER	L	80	39.150	37.604	7.809	1.00	22.18
ATOM	5518	N	SER	L	81	40.224	40.954	8.296	1.00	8.01

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ATOM	5519	CA	SER	L	81	39.747	42.309	8.522	1.00	8.94
ATOM	5520	C	SER	L	81	40.032	42.557	10.012	1.00	7.34
ATOM	5521	O	SER	L	81	39.481	41.916	10.899	1.00	5.70
ATOM	5522	CB	SER	L	81	38.288	42.400	8.187	1.00	4.33
ATOM	5523	OG	SER	L	81	37.614	41.593	9.119	1.00	25.30
ATOM	5524	N	VAL	L	82	41.010	43.417	10.244	1.00	5.46
ATOM	5525	CA	VAL	L	82	41.466	43.780	11.559	1.00	9.97
ATOM	5526	C	VAL	L	82	40.323	44.217	12.476	1.00	17.09
ATOM	5527	O	VAL	L	82	39.378	44.890	12.032	1.00	23.59
ATOM	5528	CB	VAL	L	82	42.489	44.935	11.403	1.00	10.16
ATOM	5529	CG1	VAL	L	82	42.884	45.543	12.769	1.00	7.30
ATOM	5530	CG2	VAL	L	82	43.686	44.431	10.640	1.00	4.76
ATOM	5531	N	GLU	L	83	40.441	43.858	13.757	1.00	14.70
ATOM	5532	CA	GLU	L	83	39.475	44.226	14.781	1.00	10.99
ATOM	5533	C	GLU	L	83	40.303	44.841	15.909	1.00	10.25
ATOM	5534	O	GLU	L	83	41.444	44.464	16.141	1.00	16.25
ATOM	5535	CB	GLU	L	83	38.713	43.001	15.247	1.00	15.00
ATOM	5536	CG	GLU	L	83	38.265	42.138	14.096	1.00	23.65
ATOM	5537	CD	GLU	L	83	37.104	41.218	14.450	1.00	34.29
ATOM	5538	OE1	GLU	L	83	36.846	40.983	15.680	1.00	34.32
ATOM	5539	OE2	GLU	L	83	36.463	40.735	13.473	1.00	36.45
ATOM	5540	N	PRO	L	84	39.755	45.808	16.628	1.00	8.95
ATOM	5541	CA	PRO	L	84	40.549	46.412	17.690	1.00	8.82
ATOM	5542	C	PRO	L	84	41.381	45.484	18.512	1.00	8.56
ATOM	5543	O	PRO	L	84	42.509	45.807	18.813	1.00	4.42
ATOM	5544	CB	PRO	L	84	39.531	47.145	18.534	1.00	11.88
ATOM	5545	CG	PRO	L	84	38.471	47.514	17.576	1.00	16.86
ATOM	5546	CD	PRO	L	84	38.420	46.406	16.540	1.00	16.66
ATOM	5547	N	GLU	L	85	40.837	44.339	18.903	1.00	15.39
ATOM	5548	CA	GLU	L	85	41.629	43.437	19.739	1.00	19.58
ATOM	5549	C	GLU	L	85	42.921	42.962	19.050	1.00	17.14
ATOM	5550	O	GLU	L	85	43.961	42.747	19.717	1.00	13.45
ATOM	5551	CB	GLU	L	85	40.768	42.241	20.263	1.00	23.14
ATOM	5552	CG	GLU	L	85	39.774	41.549	19.298	1.00	30.24
ATOM	5553	CD	GLU	L	85	39.317	40.143	19.802	1.00	41.62
ATOM	5554	OE1	GLU	L	85	38.598	39.395	19.078	1.00	45.74
ATOM	5555	OE2	GLU	L	85	39.683	39.769	20.943	1.00	47.56
ATOM	5556	N	ASP	L	86	42.843	42.860	17.715	1.00	11.63
ATOM	5557	CA	ASP	L	86	43.939	42.419	16.857	1.00	7.95
ATOM	5558	C	ASP	L	86	45.231	43.207	16.904	1.00	6.26
ATOM	5559	O	ASP	L	86	46.293	42.626	16.799	1.00	2.00
ATOM	5560	CB	ASP	L	86	43.458	42.347	15.430	1.00	8.64
ATOM	5561	CG	ASP	L	86	42.428	41.291	15.245	1.00	10.66
ATOM	5562	OD1	ASP	L	86	42.200	40.536	16.223	1.00	14.21
ATOM	5563	OD2	ASP	L	86	41.857	41.231	14.132	1.00	12.79
ATOM	5564	N	PHE	L	87	45.157	44.507	17.140	1.00	9.91
ATOM	5565	CA	PHE	L	87	46.370	45.317	17.204	1.00	10.08
ATOM	5566	C	PHE	L	87	47.240	44.830	18.351	1.00	12.05
ATOM	5567	O	PHE	L	87	46.871	44.885	19.540	1.00	15.07
ATOM	5568	CB	PHE	L	87	46.022	46.749	17.456	1.00	15.64
ATOM	5569	CG	PHE	L	87	45.404	47.401	16.307	1.00	19.02
ATOM	5570	CD1	PHE	L	87	44.072	47.795	16.330	1.00	20.05
ATOM	5571	CD2	PHE	L	87	46.163	47.639	15.190	1.00	19.80
ATOM	5572	CE1	PHE	L	87	43.510	48.428	15.234	1.00	24.33
ATOM	5573	CE2	PHE	L	87	45.617	48.266	14.101	1.00	29.25
ATOM	5574	CZ	PHE	L	87	44.278	48.669	14.112	1.00	28.91
ATOM	5575	N	ALA	L	88	48.420	44.384	17.957	1.00	16.61
ATOM	5576	CA	ALA	L	88	49.421	43.816	18.844	1.00	14.13
ATOM	5577	C	ALA	L	88	50.689	43.674	18.019	1.00	12.29
ATOM	5578	O	ALA	L	88	50.851	44.305	16.974	1.00	12.92

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ATOM	5579	CB	ALA	L	88	48.974	42.422	19.307	1.00	12.43
ATOM	5580	N	THR	L	89	51.571	42.815	18.489	1.00	9.92
ATOM	5581	CA	THR	L	89	52.795	42.545	17.792	1.00	3.83
ATOM	5582	C	THR	L	89	52.869	41.061	17.580	1.00	5.83
ATOM	5583	O	THR	L	89	52.665	40.270	18.501	1.00	5.11
ATOM	5584	CB	THR	L	89	53.901	43.000	18.610	1.00	4.37
ATOM	5585	OG1	THR	L	89	54.259	44.310	18.162	1.00	12.36
ATOM	5586	CG2	THR	L	89	55.025	42.014	18.586	1.00	2.00
ATOM	5587	N	TYR	L	90	53.194	40.687	16.357	1.00	11.39
ATOM	5588	CA	TYR	L	90	53.239	39.281	15.974	1.00	13.44
ATOM	5589	C	TYR	L	90	54.614	38.705	15.657	1.00	10.32
ATOM	5590	O	TYR	L	90	55.413	39.352	14.967	1.00	10.50
ATOM	5591	CB	TYR	L	90	52.342	39.074	14.749	1.00	14.57
ATOM	5592	CG	TYR	L	90	50.892	39.415	14.995	1.00	15.90
ATOM	5593	CD1	TYR	L	90	50.513	40.705	15.391	1.00	15.40
ATOM	5594	CD2	TYR	L	90	49.895	38.452	14.841	1.00	13.10
ATOM	5595	CE1	TYR	L	90	49.177	41.017	15.624	1.00	13.40
ATOM	5596	CE2	TYR	L	90	48.574	38.755	15.070	1.00	11.93
ATOM	5597	CZ	TYR	L	90	48.218	40.032	15.459	1.00	11.99
ATOM	5598	OH	TYR	L	90	46.903	40.314	15.691	1.00	11.31
ATOM	5599	N	TYR	L	91	54.850	37.483	16.136	1.00	5.22
ATOM	5600	CA	TYR	L	91	56.086	36.741	15.872	1.00	6.26
ATOM	5601	C	TYR	L	91	55.905	35.432	15.096	1.00	5.49
ATOM	5602	O	TYR	L	91	55.002	34.647	15.351	1.00	9.19
ATOM	5603	CB	TYR	L	91	56.782	36.400	17.177	1.00	5.96
ATOM	5604	CG	TYR	L	91	57.086	37.623	17.983	1.00	8.80
ATOM	5605	CD1	TYR	L	91	58.244	38.364	17.749	1.00	9.30
ATOM	5606	CD2	TYR	L	91	56.290	37.982	19.039	1.00	5.92
ATOM	5607	CE1	TYR	L	91	58.596	39.412	18.558	1.00	2.00
ATOM	5608	CE2	TYR	L	91	56.640	39.023	19.854	1.00	8.19
ATOM	5609	CZ	TYR	L	91	57.799	39.727	19.606	1.00	7.52
ATOM	5610	OH	TYR	L	91	58.174	40.751	20.433	1.00	18.75
ATOM	5611	N	CYS	L	92	56.775	35.180	14.139	1.00	8.42
ATOM	5612	CA	CYS	L	92	56.714	33.913	13.429	1.00	12.62
ATOM	5613	C	CYS	L	92	57.844	33.069	14.075	1.00	14.26
ATOM	5614	O	CYS	L	92	58.855	33.596	14.581	1.00	13.13
ATOM	5615	CB	CYS	L	92	56.985	34.115	11.972	1.00	9.99
ATOM	5616	SG	CYS	L	92	58.570	34.916	11.669	1.00	14.61
ATOM	5617	N	GLN	L	93	57.681	31.760	14.125	1.00	11.27
ATOM	5618	CA	GLN	L	93	58.729	30.981	14.751	1.00	9.32
ATOM	5619	C	GLN	L	93	58.654	29.587	14.253	1.00	10.29
ATOM	5620	O	GLN	L	93	57.571	29.023	14.180	1.00	14.45
ATOM	5621	CB	GLN	L	93	58.561	30.936	16.253	1.00	6.02
ATOM	5622	CG	GLN	L	93	59.179	29.672	16.843	1.00	4.54
ATOM	5623	CD	GLN	L	93	58.184	28.652	17.286	1.00	2.00
ATOM	5624	OE1	GLN	L	93	58.534	27.715	17.975	1.00	2.00
ATOM	5625	NE2	GLN	L	93	56.932	28.843	16.930	1.00	7.69
ATOM	5626	N	HIS	L	94	59.814	29.033	13.936	1.00	6.92
ATOM	5627	CA	HIS	L	94	59.913	27.676	13.428	1.00	8.30
ATOM	5628	C	HIS	L	94	60.064	26.638	14.525	1.00	5.49
ATOM	5629	O	HIS	L	94	59.974	26.923	15.713	1.00	2.00
ATOM	5630	CB	HIS	L	94	61.101	27.537	12.442	1.00	13.14
ATOM	5631	CG	HIS	L	94	62.451	27.481	13.106	1.00	16.57
ATOM	5632	ND1	HIS	L	94	63.553	26.949	12.493	1.00	15.29
ATOM	5633	CD2	HIS	L	94	62.853	27.853	14.345	1.00	23.23
ATOM	5634	CE1	HIS	L	94	64.579	26.977	13.328	1.00	19.45
ATOM	5635	NE2	HIS	L	94	64.181	27.524	14.462	1.00	11.56
ATOM	5636	N	SER	L	95	60.370	25.433	14.074	1.00	5.05
ATOM	5637	CA	SER	L	95	60.543	24.282	14.933	1.00	7.85
ATOM	5638	C	SER	L	95	61.184	23.214	14.031	1.00	11.64

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ATOM	5639	O	SER	L	95	60.873	22.007	14.094	1.00	8.86
ATOM	5640	CB	SER	L	95	59.182	23.813	15.423	1.00	2.00
ATOM	5641	OG	SER	L	95	58.475	23.232	14.349	1.00	2.00
ATOM	5642	N	TRP	L	96	62.073	23.695	13.168	1.00	13.30
ATOM	5643	CA	TRP	L	96	62.763	22.824	12.234	1.00	14.43
ATOM	5644	C	TRP	L	96	63.880	22.033	12.918	1.00	12.11
ATOM	5645	O	TRP	L	96	64.209	20.912	12.487	1.00	11.27
ATOM	5646	CB	TRP	L	96	63.324	23.665	11.063	1.00	17.34
ATOM	5647	CG	TRP	L	96	63.910	22.865	9.990	1.00	15.09
ATOM	5648	CD1	TRP	L	96	65.219	22.628	9.788	1.00	19.40
ATOM	5649	CD2	TRP	L	96	63.209	22.156	8.982	1.00	20.36
ATOM	5650	NE1	TRP	L	96	65.395	21.805	8.705	1.00	21.35
ATOM	5651	CE2	TRP	L	96	64.166	21.495	8.189	1.00	21.93
ATOM	5652	CE3	TRP	L	96	61.854	22.003	8.666	1.00	23.26
ATOM	5653	CZ2	TRP	L	96	63.820	20.691	7.094	1.00	22.05
ATOM	5654	CZ3	TRP	L	96	61.498	21.203	7.573	1.00	21.62
ATOM	5655	CH2	TRP	L	96	62.478	20.561	6.804	1.00	25.16
ATOM	5656	N	GLU	L	97	64.457	22.636	13.961	1.00	5.73
ATOM	5657	CA	GLU	L	97	65.534	22.022	14.698	1.00	2.00
ATOM	5658	C	GLU	L	97	65.758	22.772	15.996	1.00	4.84
ATOM	5659	O	GLU	L	97	65.096	23.769	16.287	1.00	10.62
ATOM	5660	CB	GLU	L	97	66.790	22.104	13.832	1.00	7.01
ATOM	5661	CG	GLU	L	97	67.568	23.449	13.854	1.00	17.87
ATOM	5662	CD	GLU	L	97	68.581	23.539	12.717	1.00	27.76
ATOM	5663	OE1	GLU	L	97	68.551	22.625	11.857	1.00	31.73
ATOM	5664	OE2	GLU	L	97	69.392	24.504	12.686	1.00	33.06
ATOM	5665	N	ILE	L	98	66.727	22.331	16.772	1.00	5.10
ATOM	5666	CA	ILE	L	98	67.009	23.042	17.989	1.00	4.93
ATOM	5667	C	ILE	L	98	68.106	24.086	17.645	1.00	9.06
ATOM	5668	O	ILE	L	98	69.055	23.789	16.931	1.00	16.29
ATOM	5669	CB	ILE	L	98	67.539	22.123	19.003	1.00	2.00
ATOM	5670	CG1	ILE	L	98	66.442	21.162	19.473	1.00	3.81
ATOM	5671	CG2	ILE	L	98	68.153	22.952	20.086	1.00	2.00
ATOM	5672	CD1	ILE	L	98	66.691	20.680	20.931	1.00	13.32
ATOM	5673	N	PRO	L	99	67.996	25.322	18.137	1.00	8.98
ATOM	5674	CA	PRO	L	99	66.960	25.880	19.002	1.00	10.43
ATOM	5675	C	PRO	L	99	65.856	26.497	18.195	1.00	11.01
ATOM	5676	O	PRO	L	99	66.116	27.108	17.168	1.00	17.30
ATOM	5677	CB	PRO	L	99	67.687	26.977	19.727	1.00	10.68
ATOM	5678	CG	PRO	L	99	68.652	27.503	18.679	1.00	2.00
ATOM	5679	CD	PRO	L	99	69.010	26.338	17.801	1.00	2.00
ATOM	5680	N	PRO	L	100	64.613	26.395	18.665	1.00	9.00
ATOM	5681	CA	PRO	L	100	63.594	27.029	17.843	1.00	4.20
ATOM	5682	C	PRO	L	100	63.941	28.493	17.969	1.00	2.56
ATOM	5683	O	PRO	L	100	64.555	28.904	18.960	1.00	2.00
ATOM	5684	CB	PRO	L	100	62.320	26.684	18.561	1.00	8.18
ATOM	5685	CG	PRO	L	100	62.787	26.581	20.054	1.00	10.08
ATOM	5686	CD	PRO	L	100	64.047	25.808	19.889	1.00	11.60
ATOM	5687	N	THR	L	101	63.603	29.281	16.963	1.00	2.51
ATOM	5688	CA	THR	L	101	63.950	30.684	17.030	1.00	9.51
ATOM	5689	C	THR	L	101	62.848	31.573	16.496	1.00	7.70
ATOM	5690	O	THR	L	101	62.179	31.218	15.544	1.00	8.01
ATOM	5691	CB	THR	L	101	65.264	30.936	16.245	1.00	14.12
ATOM	5692	OG1	THR	L	101	65.134	30.407	14.918	1.00	18.28
ATOM	5693	CG2	THR	L	101	66.444	30.237	16.922	1.00	10.87
ATOM	5694	N	PHE	L	102	62.686	32.746	17.097	1.00	11.90
ATOM	5695	CA	PHE	L	102	61.618	33.667	16.710	1.00	12.79
ATOM	5696	C	PHE	L	102	62.006	34.763	15.724	1.00	13.04
ATOM	5697	O	PHE	L	102	63.156	35.173	15.649	1.00	17.48
ATOM	5698	CB	PHE	L	102	61.047	34.337	17.978	1.00	10.48

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ATOM	5699	CG	PHE	L	102	60.366	33.369	18.961	1.00	10.51
ATOM	5700	CD1	PHE	L	102	61.094	32.686	19.926	1.00	6.82
ATOM	5701	CD2	PHE	L	102	58.992	33.185	18.941	1.00	15.42
ATOM	5702	CE1	PHE	L	102	60.473	31.846	20.852	1.00	10.80
ATOM	5703	CE2	PHE	L	102	58.360	32.335	19.876	1.00	18.16
ATOM	5704	CZ	PHE	L	102	59.107	31.668	20.832	1.00	13.01
ATOM	5705	N	GLY	L	103	61.028	35.269	14.988	1.00	12.16
ATOM	5706	CA	GLY	L	103	61.321	36.354	14.077	1.00	3.00
ATOM	5707	C	GLY	L	103	61.522	37.625	14.890	1.00	4.83
ATOM	5708	O	GLY	L	103	61.387	37.662	16.113	1.00	8.71
ATOM	5709	N	GLY	L	104	61.847	38.707	14.221	1.00	4.07
ATOM	5710	CA	GLY	L	104	62.028	39.937	14.957	1.00	8.17
ATOM	5711	C	GLY	L	104	60.720	40.500	15.489	1.00	10.20
ATOM	5712	O	GLY	L	104	60.698	41.200	16.498	1.00	14.07
ATOM	5713	N	GLY	L	105	59.624	40.194	14.813	1.00	6.08
ATOM	5714	CA	GLY	L	105	58.347	40.691	15.249	1.00	8.95
ATOM	5715	C	GLY	L	105	57.861	41.821	14.365	1.00	10.69
ATOM	5716	O	GLY	L	105	58.646	42.514	13.723	1.00	9.45
ATOM	5717	N	THR	L	106	56.554	42.036	14.368	1.00	7.66
ATOM	5718	CA	THR	L	106	55.977	43.070	13.553	1.00	6.35
ATOM	5719	C	THR	L	106	54.945	43.666	14.458	1.00	9.63
ATOM	5720	O	THR	L	106	54.228	42.933	15.126	1.00	16.62
ATOM	5721	CB	THR	L	106	55.261	42.492	12.357	1.00	4.91
ATOM	5722	OG1	THR	L	106	56.192	42.268	11.311	1.00	7.49
ATOM	5723	CG2	THR	L	106	54.277	43.458	11.852	1.00	4.21
ATOM	5724	N	LYS	L	107	54.890	44.382	14.525	1.00	6.14
ATOM	5725	CA	LYS	L	107	53.910	45.633	15.349	1.00	5.89
ATOM	5726	C	LYS	L	107	52.774	45.905	14.398	1.00	11.28
ATOM	5727	O	LYS	L	107	53.002	46.402	13.289	1.00	10.07
ATOM	5728	CB	LYS	L	107	54.440	46.964	15.873	1.00	5.60
ATOM	5729	CG	LYS	L	107	53.363	47.900	16.479	1.00	6.05
ATOM	5730	CD	LYS	L	107	53.867	48.608	17.725	1.00	2.00
ATOM	5731	CE	LYS	L	107	53.767	50.071	17.558	1.00	2.00
ATOM	5732	NZ	LYS	L	107	53.683	50.672	18.903	1.00	8.83
ATOM	5733	N	LEU	L	108	51.553	45.585	14.829	1.00	14.84
ATOM	5734	CA	LEU	L	108	50.381	45.829	14.009	1.00	12.40
ATOM	5735	C	LEU	L	108	49.800	47.098	14.564	1.00	11.90
ATOM	5736	O	LEU	L	108	48.893	47.037	15.376	1.00	18.43
ATOM	5737	CB	LEU	L	108	49.345	44.719	14.147	1.00	4.05
ATOM	5738	CG	LEU	L	108	48.293	44.968	13.075	1.00	3.94
ATOM	5739	CD1	LEU	L	108	48.962	44.962	11.727	1.00	4.80
ATOM	5740	CD2	LEU	L	108	47.250	43.878	13.128	1.00	10.92
ATOM	5741	N	GLU	L	109	50.347	48.227	14.130	1.00	7.29
ATOM	5742	CA	GLU	L	109	49.951	49.572	14.554	1.00	6.07
ATOM	5743	C	GLU	L	109	48.634	50.049	13.942	1.00	5.18
ATOM	5744	O	GLU	L	109	48.185	49.559	12.937	1.00	7.79
ATOM	5745	CB	GLU	L	109	51.068	50.532	14.155	1.00	10.73
ATOM	5746	CG	GLU	L	109	51.271	51.764	14.969	1.00	4.87
ATOM	5747	CD	GLU	L	109	51.484	52.969	14.087	1.00	7.92
ATOM	5748	OE1	GLU	L	109	50.977	52.993	12.947	1.00	6.20
ATOM	5749	OE2	GLU	L	109	52.160	53.904	14.545	1.00	12.06
ATOM	5750	N	ILE	L	110	48.030	51.049	14.545	1.00	6.49
ATOM	5751	CA	ILE	L	110	46.766	51.562	14.072	1.00	7.37
ATOM	5752	C	ILE	L	110	46.977	52.682	13.088	1.00	6.77
ATOM	5753	O	ILE	L	110	47.533	53.700	13.486	1.00	8.08
ATOM	5754	CB	ILE	L	110	45.992	52.144	15.269	1.00	14.43
ATOM	5755	CG1	ILE	L	110	45.777	51.063	16.337	1.00	14.70
ATOM	5756	CG2	ILE	L	110	44.625	52.731	14.825	1.00	16.43
ATOM	5757	CD1	ILE	L	110	44.883	51.577	17.461	1.00	14.46
ATOM	5758	N	LYS	L	111	46.510	52.535	11.842	1.00	5.65

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ATOM	5759	CA	LYS	L	111	46.660	53.622	10.854	1.00	8.26
ATOM	5760	C	LYS	L	111	45.896	54.821	11.418	1.00	6.91
ATOM	5761	O	LYS	L	111	44.941	54.679	12.173	1.00	10.63
ATOM	5762	CB	LYS	L	111	46.073	53.236	9.458	1.00	11.70
ATOM	5763	CG	LYS	L	111	46.891	53.658	8.166	1.00	17.59
ATOM	5764	CD	LYS	L	111	46.310	53.085	6.752	1.00	20.28
ATOM	5765	CE	LYS	L	111	46.815	51.605	6.292	1.00	27.11
ATOM	5766	NZ	LYS	L	111	46.798	51.090	4.783	1.00	5.94
ATOM	5767	N	ARG	L	112	46.339	56.010	11.076	1.00	9.87
ATOM	5768	CA	ARG	L	112	45.681	57.236	11.502	1.00	12.88
ATOM	5769	C	ARG	L	112	46.441	58.372	10.819	1.00	16.59
ATOM	5770	O	ARG	L	112	47.674	58.320	10.708	1.00	18.31
ATOM	5771	CB	ARG	L	112	45.714	57.357	13.014	1.00	7.61
ATOM	5772	CG	ARG	L	112	47.074	57.497	13.570	1.00	9.30
ATOM	5773	CD	ARG	L	112	47.393	58.941	13.723	1.00	10.72
ATOM	5774	NE	ARG	L	112	46.617	59.563	14.774	1.00	9.06
ATOM	5775	CZ	ARG	L	112	45.975	60.706	14.601	1.00	15.48
ATOM	5776	NH1	ARG	L	112	46.027	61.322	13.426	1.00	16.97
ATOM	5777	NH2	ARG	L	112	45.320	61.259	15.607	1.00	19.96
ATOM	5778	N	THR	L	113	45.726	59.394	10.348	1.00	16.47
ATOM	5779	CA	THR	L	113	46.410	60.471	9.633	1.00	12.87
ATOM	5780	C	THR	L	113	47.552	61.049	10.425	1.00	8.78
ATOM	5781	O	THR	L	113	47.577	61.017	11.657	1.00	3.08
ATOM	5782	CB	THR	L	113	45.488	61.638	9.241	1.00	14.14
ATOM	5783	OG1	THR	L	113	44.934	62.222	10.427	1.00	17.83
ATOM	5784	CG2	THR	L	113	44.381	61.151	8.267	1.00	15.38
ATOM	5785	N	VAL	L	114	48.533	61.531	9.677	1.00	10.06
ATOM	5786	CA	VAL	L	114	49.707	62.128	10.262	1.00	7.68
ATOM	5787	C	VAL	L	114	49.308	63.191	11.230	1.00	8.62
ATOM	5788	O	VAL	L	114	48.181	63.665	11.194	1.00	16.36
ATOM	5789	CB	VAL	L	114	50.552	62.718	9.194	1.00	7.70
ATOM	5790	CG1	VAL	L	114	51.560	63.700	9.789	1.00	6.65
ATOM	5791	CG2	VAL	L	114	51.201	61.574	8.431	1.00	5.83
ATOM	5792	N	ALA	L	115	50.227	63.578	12.093	1.00	3.49
ATOM	5793	CA	ALA	L	115	49.922	64.571	13.092	1.00	4.67
ATOM	5794	C	ALA	L	115	51.252	65.111	13.590	1.00	5.31
ATOM	5795	O	ALA	L	115	52.064	64.376	14.166	1.00	7.60
ATOM	5796	CB	ALA	L	115	49.101	63.914	14.247	1.00	2.18
ATOM	5797	N	ALA	L	116	51.472	66.403	13.392	1.00	8.38
ATOM	5798	CA	ALA	L	116	52.741	66.995	13.808	1.00	9.43
ATOM	5799	C	ALA	L	116	52.792	67.011	15.310	1.00	8.27
ATOM	5800	O	ALA	L	116	51.780	67.124	15.965	1.00	12.12
ATOM	5801	CB	ALA	L	116	52.885	68.386	13.250	1.00	11.63
ATOM	5802	N	PRO	L	117	53.970	66.863	15.888	1.00	9.36
ATOM	5803	CA	PRO	L	117	53.981	66.875	17.341	1.00	15.41
ATOM	5804	C	PRO	L	117	54.079	68.313	17.847	1.00	19.27
ATOM	5805	O	PRO	L	117	54.511	69.203	17.095	1.00	19.88
ATOM	5806	CB	PRO	L	117	55.220	66.070	17.654	1.00	11.66
ATOM	5807	CG	PRO	L	117	56.150	66.566	16.625	1.00	10.00
ATOM	5808	CD	PRO	L	117	55.322	66.662	15.363	1.00	11.30
ATOM	5809	N	SER	L	118	53.618	68.539	19.086	1.00	21.97
ATOM	5810	CA	SER	L	118	53.709	69.860	19.741	1.00	25.57
ATOM	5811	C	SER	L	118	54.793	69.671	20.823	1.00	24.10
ATOM	5812	O	SER	L	118	54.619	68.933	21.787	1.00	21.98
ATOM	5813	CB	SER	L	118	52.360	70.288	20.364	1.00	24.62
ATOM	5814	OG	SER	L	118	51.766	69.208	21.057	1.00	37.03
ATOM	5815	N	VAL	L	119	55.947	70.282	20.600	1.00	23.36
ATOM	5816	CA	VAL	L	119	57.047	70.123	21.528	1.00	23.11
ATOM	5817	C	VAL	L	119	57.039	71.162	22.612	1.00	22.97
ATOM	5818	O	VAL	L	119	56.581	72.259	22.387	1.00	25.62

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ATOM	5819	CB	VAL	L	119	58.407	70.174	20.775	1.00	21.14
ATOM	5820	CG1	VAL	L	119	58.232	69.671	19.353	1.00	16.93
ATOM	5821	CG2	VAL	L	119	58.938	71.596	20.734	1.00	22.67
ATOM	5822	N	PHE	L	120	57.566	70.810	23.779	1.00	24.08
ATOM	5823	CA	PHE	L	120	57.644	71.723	24.920	1.00	28.09
ATOM	5824	C	PHE	L	120	58.911	71.385	25.675	1.00	30.03
ATOM	5825	O	PHE	L	120	59.175	70.207	25.957	1.00	30.53
ATOM	5826	CB	PHE	L	120	56.493	71.551	25.914	1.00	28.63
ATOM	5827	CG	PHE	L	120	55.154	71.385	25.286	1.00	28.41
ATOM	5828	CD1	PHE	L	120	54.236	72.425	25.317	1.00	30.73
ATOM	5829	CD2	PHE	L	120	54.801	70.190	24.680	1.00	27.02
ATOM	5830	CE1	PHE	L	120	52.984	72.277	24.749	1.00	33.87
ATOM	5831	CE2	PHE	L	120	53.558	70.027	24.111	1.00	31.13
ATOM	5832	CZ	PHE	L	120	52.644	71.065	24.140	1.00	32.39
ATOM	5833	N	ILE	L	121	59.665	72.422	26.039	1.00	28.73
ATOM	5834	CA	ILE	L	121	60.927	72.237	26.733	1.00	22.93
ATOM	5835	C	ILE	L	121	60.887	72.735	28.144	1.00	24.03
ATOM	5836	O	ILE	L	121	60.559	73.888	28.395	1.00	23.44
ATOM	5837	CB	ILE	L	121	62.096	72.940	25.950	1.00	20.73
ATOM	5838	CG1	ILE	L	121	63.433	72.764	26.673	1.00	17.56
ATOM	5839	CG2	ILE	L	121	61.777	74.405	25.722	1.00	9.45
ATOM	5840	CD1	ILE	L	121	64.615	72.803	25.727	1.00	9.39
ATOM	5841	N	PHE	L	122	61.244	71.841	29.058	1.00	25.55
ATOM	5842	CA	PHE	L	122	61.285	72.148	30.483	1.00	29.20
ATOM	5843	C	PHE	L	122	62.735	72.227	30.970	1.00	32.74
ATOM	5844	O	PHE	L	122	63.490	71.274	30.830	1.00	37.21
ATOM	5845	CB	PHE	L	122	60.572	71.057	31.280	1.00	28.99
ATOM	5846	CG	PHE	L	122	59.131	70.849	30.898	1.00	32.63
ATOM	5847	CD1	PHE	L	122	58.103	71.325	31.716	1.00	35.32
ATOM	5848	CD2	PHE	L	122	58.795	70.168	29.725	1.00	34.02
ATOM	5849	CE1	PHE	L	122	56.767	71.126	31.374	1.00	34.28
ATOM	5850	CE2	PHE	L	122	57.465	69.961	29.371	1.00	32.59
ATOM	5851	CZ	PHE	L	122	56.449	70.439	30.196	1.00	34.59
ATOM	5852	N	PRO	L	123	63.132	73.355	31.572	1.00	33.74
ATOM	5853	CA	PRO	L	123	64.490	73.552	32.078	1.00	36.22
ATOM	5854	C	PRO	L	123	64.551	73.103	33.532	1.00	39.68
ATOM	5855	O	PRO	L	123	63.539	73.143	34.219	1.00	41.15
ATOM	5856	CB	PRO	L	123	64.694	75.044	31.950	1.00	35.14
ATOM	5857	CG	PRO	L	123	63.294	75.632	31.667	1.00	37.48
ATOM	5858	CD	PRO	L	123	62.306	74.538	31.826	1.00	34.62
ATOM	5859	N	PRO	L	124	65.743	72.713	34.024	1.00	40.61
ATOM	5860	CA	PRO	L	124	66.044	72.234	35.375	1.00	40.93
ATOM	5861	C	PRO	L	124	65.253	72.775	36.555	1.00	46.32
ATOM	5862	O	PRO	L	124	65.290	73.964	36.873	1.00	49.00
ATOM	5863	CB	PRO	L	124	67.520	72.519	35.513	1.00	38.12
ATOM	5864	CG	PRO	L	124	68.015	72.273	34.181	1.00	41.44
ATOM	5865	CD	PRO	L	124	66.970	72.768	33.217	1.00	40.13
ATOM	5866	N	SER	L	125	64.542	71.880	37.221	1.00	50.08
ATOM	5867	CA	SER	L	125	63.770	72.271	38.378	1.00	54.07
ATOM	5868	C	SER	L	125	64.803	72.864	39.308	1.00	54.72
ATOM	5869	O	SER	L	125	65.794	72.206	39.631	1.00	54.31
ATOM	5870	CB	SER	L	125	63.148	71.033	39.016	1.00	59.92
ATOM	5871	OG	SER	L	125	63.611	69.861	38.347	1.00	70.24
ATOM	5872	N	ASP	L	126	64.597	74.108	39.713	1.00	58.20
ATOM	5873	CA	ASP	L	126	65.531	74.767	40.630	1.00	61.07
ATOM	5874	C	ASP	L	126	65.815	73.797	41.787	1.00	60.11
ATOM	5875	O	ASP	L	126	66.972	73.594	42.203	1.00	57.12
ATOM	5876	CB	ASP	L	126	64.924	76.075	41.173	1.00	64.63
ATOM	5877	CG	ASP	L	126	65.229	77.287	40.285	1.00	70.26
ATOM	5878	OD1	ASP	L	126	66.226	77.254	39.530	1.00	71.63



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ATOM	5879	OD2	ASP	L	126	64.465	78.279	40.339	1.00	72.94
ATOM	5880	N	GLU	L	127	64.747	73.178	42.284	1.00	59.38
ATOM	5881	CA	GLU	L	127	64.874	72.230	43.379	1.00	57.94
ATOM	5882	C	GLU	L	127	65.813	71.073	43.027	1.00	57.73
ATOM	5883	O	GLU	L	127	66.516	70.564	43.899	1.00	56.47
ATOM	5884	CB	GLU	L	127	63.500	71.685	43.763	1.00	60.46
ATOM	5885	CG	GLU	L	127	63.558	70.514	44.735	1.00	64.00
ATOM	5886	CD	GLU	L	127	62.186	69.963	45.088	1.00	67.69
ATOM	5887	OE1	GLU	L	127	62.143	68.878	45.709	1.00	68.32
ATOM	5888	OE2	GLU	L	127	61.159	70.605	44.751	1.00	68.18
ATOM	5889	N	GLN	L	128	65.811	70.659	41.754	1.00	57.03
ATOM	5890	CA	GLN	L	128	66.659	69.559	41.281	1.00	54.83
ATOM	5891	C	GLN	L	128	68.130	69.982	41.154	1.00	54.83
ATOM	5892	O	GLN	L	128	69.048	69.155	41.271	1.00	51.78
ATOM	5893	CB	GLN	L	128	66.132	69.045	39.926	1.00	53.12
ATOM	5894	CG	GLN	L	128	66.691	67.689	39.480	1.00	54.29
ATOM	5895	CD	GLN	L	128	67.018	67.667	37.981	1.00	56.38
ATOM	5896	OE1	GLN	L	128	66.309	68.286	37.162	1.00	52.80
ATOM	5897	NE2	GLN	L	128	68.103	66.966	37.617	1.00	54.10
ATOM	5898	N	LEU	L	129	68.346	71.275	40.928	1.00	55.26
ATOM	5899	CA	LEU	L	129	69.696	71.793	40.773	1.00	56.61
ATOM	5900	C	LEU	L	129	70.348	71.818	42.135	1.00	60.37
ATOM	5901	O	LEU	L	129	71.580	71.746	42.252	1.00	62.18
ATOM	5902	CB	LEU	L	129	69.669	73.195	40.157	1.00	51.86
ATOM	5903	CG	LEU	L	129	69.429	73.145	38.640	1.00	51.66
ATOM	5904	CD1	LEU	L	129	68.688	74.381	38.175	1.00	46.91
ATOM	5905	CD2	LEU	L	129	70.768	73.002	37.908	1.00	50.23
ATOM	5906	N	LYS	L	130	69.510	71.892	43.166	1.00	61.47
ATOM	5907	CA	LYS	L	130	69.986	71.905	44.541	1.00	62.69
ATOM	5908	C	LYS	L	130	70.495	70.492	44.872	1.00	64.46
ATOM	5909	O	LYS	L	130	70.709	70.125	46.032	1.00	66.21
ATOM	5910	CB	LYS	L	130	68.835	72.302	45.466	1.00	61.22
ATOM	5911	CG	LYS	L	130	69.169	73.397	46.466	1.00	64.06
ATOM	5912	CD	LYS	L	130	69.705	74.655	45.777	1.00	69.78
ATOM	5913	CE	LYS	L	130	68.997	75.954	46.250	1.00	74.25
ATOM	5914	NZ	LYS	L	130	69.920	77.130	46.479	1.00	75.22
ATOM	5915	N	SER	L	131	70.702	69.697	43.833	1.00	65.34
ATOM	5916	CA	SER	L	131	71.158	68.338	44.020	1.00	64.46
ATOM	5917	C	SER	L	131	72.313	68.009	43.100	1.00	62.54
ATOM	5918	O	SER	L	131	72.631	66.838	42.892	1.00	61.64
ATOM	5919	CB	SER	L	131	69.996	67.392	43.757	1.00	68.84
ATOM	5920	OG	SER	L	131	68.767	68.111	43.726	1.00	72.13
ATOM	5921	N	GLY	L	132	72.919	69.047	42.535	1.00	61.09
ATOM	5922	CA	GLY	L	132	74.052	68.849	41.654	1.00	61.82
ATOM	5923	C	GLY	L	132	73.724	68.286	40.287	1.00	61.20
ATOM	5924	O	GLY	L	132	74.597	68.228	39.421	1.00	61.93
ATOM	5925	N	THR	L	133	72.480	67.866	40.075	1.00	59.92
ATOM	5926	CA	THR	L	133	72.105	67.328	38.773	1.00	57.16
ATOM	5927	C	THR	L	133	71.133	68.257	38.067	1.00	55.63
ATOM	5928	O	THR	L	133	70.201	68.788	38.668	1.00	51.38
ATOM	5929	CB	THR	L	133	71.471	65.944	38.885	1.00	56.51
ATOM	5930	OG1	THR	L	133	71.620	65.457	40.224	1.00	57.67
ATOM	5931	CG2	THR	L	133	72.144	64.987	37.914	1.00	55.54
ATOM	5932	N	ALA	L	134	71.390	68.479	36.785	1.00	55.78
ATOM	5933	CA	ALA	L	134	70.539	69.343	35.964	1.00	54.68
ATOM	5934	C	ALA	L	134	70.111	68.533	34.734	1.00	54.44
ATOM	5935	O	ALA	L	134	70.934	68.196	33.872	1.00	60.81
ATOM	5936	CB	ALA	L	134	71.314	70.596	35.532	1.00	48.30
ATOM	5937	N	SER	L	135	68.837	68.190	34.654	1.00	46.59
ATOM	5938	CA	SER	L	135	68.391	67.421	33.518	1.00	42.04

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ATOM	5939	C	SER	L	135	67.297	68.204	32.842	1.00	38.91
ATOM	5940	O	SER	L	135	66.362	68.619	33.497	1.00	41.71
ATOM	5941	CB	SER	L	135	67.868	66.088	34.010	1.00	44.92
ATOM	5942	OG	SER	L	135	66.975	66.287	35.093	1.00	47.03
ATOM	5943	N	VAL	L	136	67.415	68.439	31.544	1.00	33.88
ATOM	5944	CA	VAL	L	136	66.387	69.193	30.841	1.00	31.41
ATOM	5945	C	VAL	L	136	65.523	68.277	29.993	1.00	31.68
ATOM	5946	O	VAL	L	136	66.014	67.553	29.132	1.00	35.28
ATOM	5947	CB	VAL	L	136	66.990	70.274	29.912	1.00	33.36
ATOM	5948	CG1	VAL	L	136	68.238	69.748	29.223	1.00	37.64
ATOM	5949	CG2	VAL	L	136	65.980	70.661	28.837	1.00	32.94
ATOM	5950	N	VAL	L	137	64.219	68.337	30.221	1.00	29.31
ATOM	5951	CA	VAL	L	137	63.292	67.504	29.482	1.00	24.37
ATOM	5952	C	VAL	L	137	62.600	68.243	28.351	1.00	25.21
ATOM	5953	O	VAL	L	137	62.099	69.358	28.527	1.00	22.56
ATOM	5954	CB	VAL	L	137	62.209	66.955	30.368	1.00	19.46
ATOM	5955	CG1	VAL	L	137	61.128	66.361	29.512	1.00	23.46
ATOM	5956	CG2	VAL	L	137	62.752	65.923	31.254	1.00	19.93
ATOM	5957	N	CYS	L	138	62.589	67.599	27.191	1.00	26.24
ATOM	5958	CA	CYS	L	138	61.969	68.120	25.994	1.00	26.51
ATOM	5959	C	CYS	L	138	60.801	67.157	25.748	1.00	26.48
ATOM	5960	O	CYS	L	138	60.926	65.959	25.985	1.00	30.21
ATOM	5961	CB	CYS	L	138	63.034	68.119	24.901	1.00	22.22
ATOM	5962	SG	CYS	L	138	62.434	68.043	23.212	1.00	35.62
ATOM	5963	N	LEU	L	139	59.653	67.660	25.308	1.00	26.30
ATOM	5964	CA	LEU	L	139	58.511	66.771	25.120	1.00	24.63
ATOM	5965	C	LEU	L	139	57.719	66.958	23.850	1.00	24.16
ATOM	5966	O	LEU	L	139	57.238	68.049	23.570	1.00	24.24
ATOM	5967	CB	LEU	L	139	57.551	66.894	26.308	1.00	26.32
ATOM	5968	CG	LEU	L	139	56.039	66.666	26.083	1.00	22.13
ATOM	5969	CD1	LEU	L	139	55.713	65.197	26.160	1.00	18.87
ATOM	5970	CD2	LEU	L	139	55.235	67.389	27.127	1.00	19.36
ATOM	5971	N	LEU	L	140	57.573	65.881	23.091	1.00	25.86
ATOM	5972	CA	LEU	L	140	56.814	65.937	21.852	1.00	31.39
ATOM	5973	C	LEU	L	140	55.438	65.374	22.119	1.00	31.60
ATOM	5974	O	LEU	L	140	55.312	64.148	22.260	1.00	32.98
ATOM	5975	CB	LEU	L	140	57.524	65.121	20.755	1.00	32.52
ATOM	5976	CG	LEU	L	140	58.766	65.820	20.156	1.00	36.63
ATOM	5977	CD1	LEU	L	140	59.880	65.836	21.207	1.00	37.43
ATOM	5978	CD2	LEU	L	140	59.254	65.121	18.882	1.00	36.01
ATOM	5979	N	ASN	L	141	54.410	66.231	22.211	1.00	27.73
ATOM	5980	CA	ASN	L	141	53.100	65.662	22.465	1.00	30.03
ATOM	5981	C	ASN	L	141	52.233	65.237	21.269	1.00	28.76
ATOM	5982	O	ASN	L	141	52.232	65.828	20.188	1.00	27.23
ATOM	5983	CB	ASN	L	141	52.244	66.515	23.448	1.00	27.83
ATOM	5984	CG	ASN	L	141	51.127	65.665	24.138	1.00	32.37
ATOM	5985	OD1	ASN	L	141	50.099	66.183	24.559	1.00	37.81
ATOM	5986	ND2	ASN	L	141	51.344	64.351	24.223	1.00	32.34
ATOM	5987	N	ASN	L	142	51.499	64.163	21.523	1.00	27.44
ATOM	5988	CA	ASN	L	142	50.560	63.598	20.607	1.00	26.52
ATOM	5989	C	ASN	L	142	50.896	63.783	19.145	1.00	24.75
ATOM	5990	O	ASN	L	142	50.315	64.625	18.477	1.00	27.64
ATOM	5991	CB	ASN	L	142	49.192	64.175	20.984	1.00	31.51
ATOM	5992	CG	ASN	L	142	48.715	63.680	22.389	1.00	41.86
ATOM	5993	OD1	ASN	L	142	48.694	64.431	23.395	1.00	36.99
ATOM	5994	ND2	ASN	L	142	48.357	62.390	22.453	1.00	46.94
ATOM	5995	N	PHE	L	143	51.859	62.991	18.671	1.00	24.39
ATOM	5996	CA	PHE	L	143	52.306	62.986	17.263	1.00	20.59
ATOM	5997	C	PHE	L	143	52.117	61.593	16.645	1.00	16.19
ATOM	5998	O	PHE	L	143	51.806	60.609	17.334	1.00	14.75

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ATOM	5999	CB	PHE	L	143	53.800	63.353	17.134	1.00	14.86
ATOM	6000	CG	PHE	L	143	54.741	62.421	17.902	1.00	12.64
ATOM	6001	CD1	PHE	L	143	55.110	62.699	19.227	1.00	10.38
ATOM	6002	CD2	PHE	L	143	55.279	61.289	17.297	1.00	11.68
ATOM	6003	CE1	PHE	L	143	55.987	61.884	19.928	1.00	3.34
ATOM	6004	CE2	PHE	L	143	56.155	60.472	17.995	1.00	8.27
ATOM	6005	CZ	PHE	L	143	56.505	60.777	19.318	1.00	5.82
ATOM	6006	N	TYR	L	144	52.337	61.510	15.344	1.00	7.42
ATOM	6007	CA	TYR	L	144	52.228	60.235	14.656	1.00	10.65
ATOM	6008	C	TYR	L	144	52.541	60.555	13.235	1.00	10.04
ATOM	6009	O	TYR	L	144	52.213	61.638	12.788	1.00	14.97
ATOM	6010	CB	TYR	L	144	50.809	59.677	14.697	1.00	8.36
ATOM	6011	CG	TYR	L	144	50.641	58.454	13.800	1.00	8.26
ATOM	6012	CD1	TYR	L	144	50.417	57.194	14.366	1.00	3.29
ATOM	6013	CD2	TYR	L	144	50.698	58.556	12.386	1.00	2.00
ATOM	6014	CE1	TYR	L	144	50.254	56.069	13.572	1.00	2.00
ATOM	6015	CE2	TYR	L	144	50.535	57.434	11.582	1.00	2.00
ATOM	6016	CZ	TYR	L	144	50.316	56.195	12.188	1.00	2.00
ATOM	6017	OH	TYR	L	144	50.186	55.066	11.419	1.00	4.80
ATOM	6018	N	PRO	L	145	53.244	59.645	12.507	1.00	8.27
ATOM	6019	CA	PRO	L	145	53.728	58.319	12.907	1.00	3.97
ATOM	6020	C	PRO	L	145	54.698	58.428	14.042	1.00	5.48
ATOM	6021	O	PRO	L	145	55.051	59.526	14.483	1.00	3.31
ATOM	6022	CB	PRO	L	145	54.457	57.806	11.675	1.00	3.28
ATOM	6023	CG	PRO	L	145	54.026	58.682	10.540	1.00	9.45
ATOM	6024	CD	PRO	L	145	53.559	59.968	11.110	1.00	11.45
ATOM	6025	N	ARG	L	146	55.168	57.265	14.477	1.00	10.67
ATOM	6026	CA	ARG	L	146	56.116	57.184	15.583	1.00	15.83
ATOM	6027	C	ARG	L	146	57.556	57.632	15.277	1.00	18.65
ATOM	6028	O	ARG	L	146	58.339	57.909	16.197	1.00	22.55
ATOM	6029	CB	ARG	L	146	56.158	55.767	16.139	1.00	12.01
ATOM	6030	CG	ARG	L	146	56.851	55.715	17.468	1.00	16.18
ATOM	6031	CD	ARG	L	146	57.720	54.503	17.531	1.00	27.51
ATOM	6032	NE	ARG	L	146	58.110	54.132	18.892	1.00	33.50
ATOM	6033	CZ	ARG	L	146	58.682	54.967	19.758	1.00	34.21
ATOM	6034	NH1	ARG	L	146	58.928	56.224	19.405	1.00	29.88
ATOM	6035	NH2	ARG	L	146	59.025	54.537	20.968	1.00	32.75
ATOM	6036	N	GLU	L	147	57.905	57.702	13.994	1.00	18.44
ATOM	6037	CA	GLU	L	147	59.238	58.112	13.591	1.00	14.57
ATOM	6038	C	GLU	L	147	59.448	59.588	13.938	1.00	13.18
ATOM	6039	O	GLU	L	147	58.774	60.470	13.395	1.00	17.19
ATOM	6040	CB	GLU	L	147	59.375	57.871	12.105	1.00	17.97
ATOM	6041	CG	GLU	L	147	59.420	56.407	11.765	1.00	28.99
ATOM	6042	CD	GLU	L	147	58.044	55.827	11.450	1.00	37.11
ATOM	6043	OE1	GLU	L	147	57.692	54.762	12.005	1.00	41.01
ATOM	6044	OE2	GLU	L	147	57.304	56.426	10.637	1.00	43.87
ATOM	6045	N	ALA	L	148	60.395	59.868	14.822	1.00	11.11
ATOM	6046	CA	ALA	L	148	60.621	61.244	15.227	1.00	13.37
ATOM	6047	C	ALA	L	148	62.037	61.566	15.705	1.00	15.50
ATOM	6048	O	ALA	L	148	62.430	61.160	16.791	1.00	19.25
ATOM	6049	CB	ALA	L	148	59.619	61.601	16.315	1.00	16.63
ATOM	6050	N	LYS	L	149	62.812	62.292	14.902	1.00	19.20
ATOM	6051	CA	LYS	L	149	64.161	62.652	15.316	1.00	21.88
ATOM	6052	C	LYS	L	149	64.126	63.817	16.271	1.00	25.21
ATOM	6053	O	LYS	L	149	63.382	64.783	16.073	1.00	23.79
ATOM	6054	CB	LYS	L	149	65.028	63.032	14.145	1.00	22.28
ATOM	6055	CG	LYS	L	149	66.321	63.697	14.583	1.00	32.23
ATOM	6056	CD	LYS	L	149	67.514	63.172	13.752	1.00	42.98
ATOM	6057	CE	LYS	L	149	68.161	64.260	12.855	1.00	45.27
ATOM	6058	NZ	LYS	L	149	67.512	64.378	11.513	1.00	46.68

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ATOM	6059	N	VAL	L	150	64.963	63.719	17.300	1.00	28.45
ATOM	6060	CA	VAL	L	150	65.041	64.734	18.349	1.00	34.29
ATOM	6061	C	VAL	L	150	66.492	65.009	18.798	1.00	37.90
ATOM	6062	O	VAL	L	150	66.966	64.433	19.803	1.00	40.07
ATOM	6063	CB	VAL	L	150	64.214	64.280	19.595	1.00	35.07
ATOM	6064	CG1	VAL	L	150	63.568	65.493	20.310	1.00	34.07
ATOM	6065	CG2	VAL	L	150	63.164	63.275	19.170	1.00	34.82
ATOM	6066	N	GLN	L	151	67.185	65.888	18.065	1.00	37.00
ATOM	6067	CA	GLN	L	151	68.584	66.228	18.368	1.00	36.53
ATOM	6068	C	GLN	L	151	68.654	67.293	19.427	1.00	35.53
ATOM	6069	O	GLN	L	151	67.801	68.173	19.443	1.00	32.29
ATOM	6070	CB	GLN	L	151	69.302	66.761	17.121	1.00	37.50
ATOM	6071	CG	GLN	L	151	70.509	65.934	16.644	1.00	41.41
ATOM	6072	CD	GLN	L	151	70.663	65.997	15.141	1.00	41.35
ATOM	6073	OE1	GLN	L	151	71.070	65.024	14.503	1.00	42.33
ATOM	6074	NE2	GLN	L	151	70.305	67.142	14.559	1.00	42.74
ATOM	6075	N	TRP	L	152	69.676	67.223	20.290	1.00	36.43
ATOM	6076	CA	TRP	L	152	69.872	68.234	21.345	1.00	36.48
ATOM	6077	C	TRP	L	152	71.063	69.148	21.019	1.00	38.93
ATOM	6078	O	TRP	L	152	72.078	68.710	20.456	1.00	39.99
ATOM	6079	CB	TRP	L	152	70.141	67.583	22.690	1.00	33.28
ATOM	6080	CG	TRP	L	152	68.922	67.197	23.450	1.00	30.89
ATOM	6081	CD1	TRP	L	152	68.403	65.942	23.570	1.00	33.28
ATOM	6082	CD2	TRP	L	152	68.181	68.019	24.346	1.00	28.97
ATOM	6083	NE1	TRP	L	152	67.389	65.924	24.496	1.00	30.01
ATOM	6084	CE2	TRP	L	152	67.230	67.188	24.997	1.00	29.91
ATOM	6085	CE3	TRP	L	152	68.221	69.373	24.674	1.00	27.73
ATOM	6086	CZ2	TRP	L	152	66.330	67.665	25.955	1.00	28.26
ATOM	6087	CZ3	TRP	L	152	67.334	69.851	25.634	1.00	29.99
ATOM	6088	CH2	TRP	L	152	66.398	68.993	26.264	1.00	30.18
ATOM	6089	N	LYS	L	153	70.945	70.417	21.391	1.00	39.74
ATOM	6090	CA	LYS	L	153	72.009	71.382	21.131	1.00	40.84
ATOM	6091	C	LYS	L	153	72.262	72.356	22.298	1.00	43.28
ATOM	6092	O	LYS	L	153	71.417	73.192	22.622	1.00	42.39
ATOM	6093	CB	LYS	L	153	71.698	72.146	19.841	1.00	35.75
ATOM	6094	CG	LYS	L	153	71.709	71.239	18.609	1.00	39.12
ATOM	6095	CD	LYS	L	153	71.847	72.018	17.309	1.00	45.05
ATOM	6096	CE	LYS	L	153	70.690	71.744	16.345	1.00	45.35
ATOM	6097	NZ	LYS	L	153	69.604	72.793	16.415	1.00	44.77
ATOM	6098	N	VAL	L	154	73.440	72.244	22.916	1.00	45.17
ATOM	6099	CA	VAL	L	154	73.808	73.105	24.030	1.00	42.36
ATOM	6100	C	VAL	L	154	74.811	74.137	23.566	1.00	45.56
ATOM	6101	O	VAL	L	154	75.888	73.797	23.091	1.00	46.75
ATOM	6102	CB	VAL	L	154	74.447	72.320	25.135	1.00	41.71
ATOM	6103	CG1	VAL	L	154	74.790	73.259	26.279	1.00	39.70
ATOM	6104	CG2	VAL	L	154	73.507	71.195	25.573	1.00	43.45
ATOM	6105	N	ASP	L	155	74.435	75.402	23.703	1.00	50.68
ATOM	6106	CA	ASP	L	155	75.265	76.540	23.307	1.00	53.98
ATOM	6107	C	ASP	L	155	75.791	76.293	21.905	1.00	55.19
ATOM	6108	O	ASP	L	155	76.980	76.408	21.635	1.00	56.44
ATOM	6109	CB	ASP	L	155	76.423	76.736	24.296	1.00	57.06
ATOM	6110	CG	ASP	L	155	76.011	77.520	25.543	1.00	62.12
ATOM	6111	OD1	ASP	L	155	74.814	77.855	25.679	1.00	63.49
ATOM	6112	OD2	ASP	L	155	76.885	77.803	26.394	1.00	65.40
ATOM	6113	N	ASN	L	156	74.877	75.923	21.020	1.00	57.74
ATOM	6114	CA	ASN	L	156	75.195	75.658	19.627	1.00	60.57
ATOM	6115	C	ASN	L	156	75.967	74.366	19.513	1.00	58.85
ATOM	6116	O	ASN	L	156	76.171	73.854	18.417	1.00	62.93
ATOM	6117	CB	ASN	L	156	76.022	76.803	19.021	1.00	67.82
ATOM	6118	CG	ASN	L	156	75.449	78.183	19.343	1.00	77.18

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ATOM	6119	OD1	ASN	L	156	74.224	78.351	19.455	1.00	80.76
ATOM	6120	ND2	ASN	L	156	76.336	79.181	19.497	1.00	78.23
ATOM	6121	N	ALA	L	157	76.415	73.833	20.636	1.00	54.53
ATOM	6122	CA	ALA	L	157	77.155	72.582	20.593	1.00	56.93
ATOM	6123	C	ALA	L	157	76.188	71.400	20.417	1.00	58.24
ATOM	6124	O	ALA	L	157	75.536	70.977	21.375	1.00	59.93
ATOM	6125	CB	ALA	L	157	77.970	72.424	21.867	1.00	55.91
ATOM	6126	N	LEU	L	158	76.097	70.856	19.204	1.00	57.21
ATOM	6127	CA	LEU	L	158	75.167	69.754	18.971	1.00	58.02
ATOM	6128	C	LEU	L	158	75.414	68.563	19.893	1.00	56.60
ATOM	6129	O	LEU	L	158	76.337	67.787	19.692	1.00	57.08
ATOM	6130	CB	LEU	L	158	75.215	69.299	17.504	1.00	61.21
ATOM	6131	CG	LEU	L	158	74.453	68.015	17.086	1.00	64.28
ATOM	6132	CD1	LEU	L	158	75.396	66.796	17.129	1.00	63.06
ATOM	6133	CD2	LEU	L	158	73.239	67.776	17.992	1.00	63.32
ATOM	6134	N	GLN	L	159	74.586	68.430	20.917	1.00	55.87
ATOM	6135	CA	GLN	L	159	74.703	67.317	21.847	1.00	54.76
ATOM	6136	C	GLN	L	159	74.818	66.041	21.042	1.00	53.20
ATOM	6137	O	GLN	L	159	74.499	66.033	19.847	1.00	52.24
ATOM	6138	CB	GLN	L	159	73.455	67.241	22.722	1.00	57.42
ATOM	6139	CG	GLN	L	159	73.445	68.244	23.850	1.00	58.52
ATOM	6140	CD	GLN	L	159	74.749	68.222	24.623	1.00	61.00
ATOM	6141	OE1	GLN	L	159	75.798	68.631	24.113	1.00	63.56
ATOM	6142	NE2	GLN	L	159	74.699	67.730	25.853	1.00	60.34
ATOM	6143	N	SER	L	160	75.266	64.967	21.685	1.00	51.92
ATOM	6144	CA	SER	L	160	75.396	63.676	20.999	1.00	53.99
ATOM	6145	C	SER	L	160	75.898	62.625	21.955	1.00	50.59
ATOM	6146	O	SER	L	160	75.896	61.424	21.660	1.00	48.83
ATOM	6147	CB	SER	L	160	76.371	63.764	19.812	1.00	59.83
ATOM	6148	OG	SER	L	160	76.765	62.469	19.370	1.00	61.97
ATOM	6149	N	GLY	L	161	76.354	63.090	23.102	1.00	48.52
ATOM	6150	CA	GLY	L	161	76.846	62.160	24.084	1.00	49.00
ATOM	6151	C	GLY	L	161	75.676	61.446	24.711	1.00	48.86
ATOM	6152	O	GLY	L	161	75.274	60.371	24.249	1.00	45.83
ATOM	6153	N	ASN	L	162	75.090	62.076	25.732	1.00	50.28
ATOM	6154	CA	ASN	L	162	73.984	61.456	26.440	1.00	51.72
ATOM	6155	C	ASN	L	162	72.689	62.235	26.720	1.00	52.23
ATOM	6156	O	ASN	L	162	72.660	63.337	27.313	1.00	51.63
ATOM	6157	CB	ASN	L	162	74.506	60.823	27.727	1.00	50.50
ATOM	6158	CG	ASN	L	162	75.283	59.554	27.456	1.00	53.50
ATOM	6159	OD1	ASN	L	162	75.426	59.132	26.307	1.00	53.82
ATOM	6160	ND2	ASN	L	162	75.791	58.935	28.512	1.00	59.23
ATOM	6161	N	SER	L	163	71.623	61.596	26.237	1.00	49.43
ATOM	6162	CA	SER	L	163	70.245	62.034	26.336	1.00	42.83
ATOM	6163	C	SER	L	163	69.453	60.721	26.225	1.00	41.28
ATOM	6164	O	SER	L	163	69.886	59.773	25.543	1.00	39.26
ATOM	6165	CB	SER	L	163	69.904	62.958	25.162	1.00	44.14
ATOM	6166	OG	SER	L	163	70.351	62.416	23.919	1.00	43.71
ATOM	6167	N	GLN	L	164	68.303	60.670	26.895	1.00	39.48
ATOM	6168	CA	GLN	L	164	67.446	59.481	26.888	1.00	36.86
ATOM	6169	C	GLN	L	164	65.986	59.764	26.483	1.00	34.87
ATOM	6170	O	GLN	L	164	65.300	60.619	27.067	1.00	33.37
ATOM	6171	CB	GLN	L	164	67.471	58.784	28.262	1.00	34.61
ATOM	6172	CG	GLN	L	164	68.631	57.802	28.463	1.00	35.89
ATOM	6173	CD	GLN	L	164	68.604	57.107	29.838	1.00	40.10
ATOM	6174	OE1	GLN	L	164	67.817	57.452	30.721	1.00	43.31
ATOM	6175	NE2	GLN	L	164	69.467	56.123	30.013	1.00	39.56
ATOM	6176	N	GLU	L	165	65.545	59.041	25.451	1.00	31.81
ATOM	6177	CA	GLU	L	165	64.187	59.120	24.922	1.00	24.94
ATOM	6178	C	GLU	L	165	63.318	58.017	25.586	1.00	21.34

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ATOM	6179	O	GLU	L	165	63.819	56.954	25.996	1.00	14.84
ATOM	6180	CB	GLU	L	165	64.206	58.902	23.394	1.00	22.22
ATOM	6181	CG	GLU	L	165	64.752	60.056	22.546	1.00	22.34
ATOM	6182	CD	GLU	L	165	64.368	59.892	21.066	1.00	30.38
ATOM	6183	OE1	GLU	L	165	63.715	58.855	20.747	1.00	34.65
ATOM	6184	OE2	GLU	L	165	64.709	60.787	20.239	1.00	28.30
ATOM	6185	N	SER	L	166	62.018	58.308	25.706	1.00	20.80
ATOM	6186	CA	SER	L	166	61.015	57.365	26.234	1.00	17.81
ATOM	6187	C	SER	L	166	59.723	57.622	25.474	1.00	12.81
ATOM	6188	O	SER	L	166	59.406	58.774	25.208	1.00	13.31
ATOM	6189	CB	SER	L	166	60.759	57.555	27.710	1.00	16.34
ATOM	6190	OG	SER	L	166	59.699	56.693	28.058	1.00	16.76
ATOM	6191	N	VAL	L	167	58.993	56.582	25.092	1.00	6.60
ATOM	6192	CA	VAL	L	167	57.797	56.837	24.303	1.00	8.22
ATOM	6193	C	VAL	L	167	56.568	56.154	24.866	1.00	10.72
ATOM	6194	O	VAL	L	167	56.678	55.278	25.731	1.00	17.96
ATOM	6195	CB	VAL	L	167	58.021	56.369	22.851	1.00	3.76
ATOM	6196	CG1	VAL	L	167	56.824	56.620	22.035	1.00	8.07
ATOM	6197	CG2	VAL	L	167	59.133	57.129	22.235	1.00	8.24
ATOM	6198	N	THR	L	168	55.396	56.520	24.356	1.00	7.43
ATOM	6199	CA	THR	L	168	54.167	55.915	24.841	1.00	5.82
ATOM	6200	C	THR	L	168	53.469	55.124	23.753	1.00	4.89
ATOM	6201	O	THR	L	168	53.639	55.388	22.574	1.00	4.47
ATOM	6202	CB	THR	L	168	53.191	56.980	25.331	1.00	7.96
ATOM	6203	OG1	THR	L	168	52.998	57.951	24.289	1.00	14.32
ATOM	6204	CG2	THR	L	168	53.735	57.674	26.587	1.00	8.35
ATOM	6205	N	GLU	L	169	52.649	54.169	24.149	1.00	8.87
ATOM	6206	CA	GLU	L	169	51.924	53.380	23.173	1.00	16.56
ATOM	6207	C	GLU	L	169	50.848	54.263	22.531	1.00	15.04
ATOM	6208	O	GLU	L	169	50.412	55.257	23.111	1.00	17.71
ATOM	6209	CB	GLU	L	169	51.300	52.165	23.857	1.00	26.25
ATOM	6210	CG	GLU	L	169	51.875	50.790	23.418	1.00	36.99
ATOM	6211	CD	GLU	L	169	53.408	50.761	23.322	1.00	42.84
ATOM	6212	OE1	GLU	L	169	54.051	51.637	23.961	1.00	42.62
ATOM	6213	OE2	GLU	L	169	53.957	49.867	22.609	1.00	46.26
ATOM	6214	N	GLN	L	170	50.429	53.933	21.324	1.00	12.98
ATOM	6215	CA	GLN	L	170	49.420	54.770	20.707	1.00	17.87
ATOM	6216	C	GLN	L	170	48.352	55.130	21.730	1.00	21.74
ATOM	6217	O	GLN	L	170	47.921	54.257	22.497	1.00	18.61
ATOM	6218	CB	GLN	L	170	48.778	54.045	19.545	1.00	14.21
ATOM	6219	CG	GLN	L	170	49.734	53.531	18.522	1.00	9.70
ATOM	6220	CD	GLN	L	170	49.007	53.245	17.209	1.00	12.30
ATOM	6221	OE1	GLN	L	170	48.773	54.132	16.367	1.00	13.51
ATOM	6222	NE2	GLN	L	170	48.623	51.997	17.042	1.00	8.79
ATOM	6223	N	ASP	L	171	47.937	56.407	21.729	1.00	29.43
ATOM	6224	CA	ASP	L	171	46.905	56.908	22.651	1.00	35.80
ATOM	6225	C	ASP	L	171	45.594	56.162	22.436	1.00	38.38
ATOM	6226	O	ASP	L	171	45.210	55.864	21.290	1.00	42.20
ATOM	6227	CB	ASP	L	171	46.629	58.405	22.454	1.00	40.84
ATOM	6228	CG	ASP	L	171	45.952	59.037	23.667	1.00	48.83
ATOM	6229	OD1	ASP	L	171	45.720	58.311	24.667	1.00	52.33
ATOM	6230	OD2	ASP	L	171	45.660	60.256	23.627	1.00	52.50
ATOM	6231	N	SER	L	172	44.916	55.872	23.542	1.00	34.79
ATOM	6232	CA	SER	L	172	43.657	55.162	23.510	1.00	32.52
ATOM	6233	C	SER	L	172	42.586	56.106	22.976	1.00	34.38
ATOM	6234	O	SER	L	172	41.479	55.685	22.641	1.00	40.03
ATOM	6235	CB	SER	L	172	43.307	54.723	24.906	1.00	32.13
ATOM	6236	OG	SER	L	172	42.958	55.875	25.647	1.00	42.85
ATOM	6237	N	LYS	L	173	42.908	57.389	22.888	1.00	32.56
ATOM	6238	CA	LYS	L	173	41.951	58.343	22.368	1.00	34.15

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ATOM	6239	C	LYS	L	173	42.248	58.710	20.907	1.00	32.95
ATOM	6240	O	LYS	L	173	41.451	58.411	20.029	1.00	37.09
ATOM	6241	CB	LYS	L	173	41.939	59.611	23.223	1.00	40.54
ATOM	6242	CG	LYS	L	173	40.808	59.694	24.249	1.00	46.78
ATOM	6243	CD	LYS	L	173	40.937	60.974	25.104	1.00	55.99
ATOM	6244	CE	LYS	L	173	41.607	60.692	26.484	1.00	63.08
ATOM	6245	NZ	LYS	L	173	42.651	61.699	26.957	1.00	62.53
ATOM	6246	N	ASP	L	174	43.394	59.337	20.639	1.00	30.08
ATOM	6247	CA	ASP	L	174	43.751	59.786	19.269	1.00	26.23
ATOM	6248	C	ASP	L	174	44.733	58.840	18.518	1.00	26.76
ATOM	6249	O	ASP	L	174	45.123	59.081	17.347	1.00	20.88
ATOM	6250	CB	ASP	L	174	44.360	61.186	19.351	1.00	17.71
ATOM	6251	CG	ASP	L	174	45.525	61.237	20.331	1.00	20.50
ATOM	6252	OD1	ASP	L	174	46.074	60.145	20.638	1.00	15.83
ATOM	6253	OD2	ASP	L	174	45.886	62.346	20.794	1.00	17.75
ATOM	6254	N	SER	L	175	45.111	57.755	19.192	1.00	24.98
ATOM	6255	CA	SER	L	175	46.024	56.808	18.591	1.00	22.94
ATOM	6256	C	SER	L	175	47.248	57.575	18.129	1.00	21.42
ATOM	6257	O	SER	L	175	47.642	57.483	16.958	1.00	21.18
ATOM	6258	CB	SER	L	175	45.353	56.149	17.391	1.00	22.95
ATOM	6259	OG	SER	L	175	44.132	55.542	17.762	1.00	25.21
ATOM	6260	N	THR	L	176	47.814	58.364	19.039	1.00	16.35
ATOM	6261	CA	THR	L	176	49.009	59.127	18.719	1.00	16.44
ATOM	6262	C	THR	L	176	50.084	59.000	19.787	1.00	20.31
ATOM	6263	O	THR	L	176	49.791	58.787	20.969	1.00	25.76
ATOM	6264	CB	THR	L	176	48.741	60.594	18.543	1.00	7.77
ATOM	6265	OG1	THR	L	176	48.397	61.145	19.811	1.00	10.17
ATOM	6266	CG2	THR	L	176	47.657	60.810	17.524	1.00	9.37
ATOM	6267	N	TYR	L	177	51.336	59.117	19.346	1.00	19.23
ATOM	6268	CA	TYR	L	177	52.483	59.017	20.228	1.00	16.17
ATOM	6269	C	TYR	L	177	52.835	60.284	20.982	1.00	17.81
ATOM	6270	O	TYR	L	177	52.285	61.359	20.736	1.00	21.19
ATOM	6271	CB	TYR	L	177	53.681	58.556	19.426	1.00	12.68
ATOM	6272	CG	TYR	L	177	53.435	57.219	18.819	1.00	6.41
ATOM	6273	CD1	TYR	L	177	53.346	56.091	19.611	1.00	2.00
ATOM	6274	CD2	TYR	L	177	53.230	57.083	17.456	1.00	7.00
ATOM	6275	CE	TYR	L	177	53.055	54.852	19.051	1.00	2.00
ATOM	6276	CE2	TYR	L	177	52.937	55.841	16.896	1.00	3.79
ATOM	6277	CZ	TYR	L	177	52.853	54.748	17.696	1.00	2.00
ATOM	6278	OH	TYR	L	177	52.563	53.552	17.126	1.00	2.00
ATOM	6279	N	SER	L	178	53.750	60.127	21.929	1.00	16.93
ATOM	6280	CA	SER	L	178	54.229	61.227	22.745	1.00	18.74
ATOM	6281	C	SER	L	178	55.533	60.680	23.262	1.00	20.20
ATOM	6282	O	SER	L	178	55.555	59.628	23.889	1.00	20.62
ATOM	6283	CB	SER	L	178	53.257	61.516	23.891	1.00	17.98
ATOM	6284	OG	SER	L	178	52.032	62.082	23.416	1.00	11.95
ATOM	6285	N	LEU	L	179	56.628	61.351	22.932	1.00	21.09
ATOM	6286	CA	LEU	L	179	57.941	60.883	23.361	1.00	24.19
ATOM	6287	C	LEU	L	179	58.546	61.916	24.298	1.00	26.34
ATOM	6288	O	LEU	L	179	58.156	63.082	24.278	1.00	29.52
ATOM	6289	CB	LEU	L	179	58.849	60.650	22.122	1.00	23.84
ATOM	6290	CG	LEU	L	179	60.397	60.630	22.078	1.00	14.90
ATOM	6291	CD1	LEU	L	179	60.733	60.685	20.615	1.00	18.72
ATOM	6292	CD2	LEU	L	179	61.099	61.831	22.746	1.00	11.74
ATOM	6293	N	SER	L	180	59.525	61.505	25.092	1.00	28.13
ATOM	6294	CA	SER	L	180	60.150	62.434	26.023	1.00	31.18
ATOM	6295	C	SER	L	180	61.674	62.278	26.035	1.00	35.05
ATOM	6296	O	SER	L	180	62.215	61.331	26.644	1.00	36.38
ATOM	6297	CB	SER	L	180	59.599	62.214	27.440	1.00	33.01
ATOM	6298	OG	SER	L	180	60.151	61.048	28.051	1.00	36.47

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ATOM	6299	N	SER	L	181	62.361	63.199	25.357	1.00	36.07
ATOM	6300	CA	SER	L	181	63.837	63.189	25.313	1.00	36.85
ATOM	6301	C	SER	L	181	64.391	63.993	26.477	1.00	33.49
ATOM	6302	O	SER	L	181	64.131	65.196	26.585	1.00	33.64
ATOM	6303	CB	SER	L	181	64.377	63.801	24.011	1.00	39.35
ATOM	6304	OG	SER	L	181	65.799	63.882	24.044	1.00	38.98
ATOM	6305	N	THR	L	182	65.198	63.353	27.317	1.00	29.83
ATOM	6306	CA	THR	L	182	65.731	64.055	28.483	1.00	29.02
ATOM	6307	C	THR	L	182	67.232	64.299	28.560	1.00	27.36
ATOM	6308	O	THR	L	182	67.957	63.476	29.114	1.00	28.44
ATOM	6309	CB	THR	L	182	65.370	63.339	29.789	1.00	28.69
ATOM	6310	OG1	THR	L	182	63.982	62.991	29.799	1.00	31.58
ATOM	6311	CG2	THR	L	182	65.702	64.221	30.960	1.00	22.58
ATOM	6312	N	LEU	L	183	67.703	65.437	28.053	1.00	27.13
ATOM	6313	CA	LEU	L	183	69.128	65.746	28.132	1.00	25.68
ATOM	6314	C	LEU	L	183	69.460	65.856	29.612	1.00	25.94
ATOM	6315	O	LEU	L	183	68.651	66.326	30.399	1.00	22.38
ATOM	6316	CB	LEU	L	183	69.452	67.066	27.457	1.00	24.73
ATOM	6317	CG	LEU	L	183	70.951	67.365	27.511	1.00	25.76
ATOM	6318	CD1	LEU	L	183	71.484	67.194	26.082	1.00	26.29
ATOM	6319	CD2	LEU	L	183	71.261	68.765	28.068	1.00	13.87
ATOM	6320	N	THR	L	184	70.654	65.430	29.997	1.00	31.95
ATOM	6321	CA	THR	L	184	71.017	65.467	31.408	1.00	37.86
ATOM	6322	C	THR	L	184	72.486	65.836	31.672	1.00	42.21
ATOM	6323	O	THR	L	184	73.404	65.041	31.446	1.00	43.13
ATOM	6324	CB	THR	L	184	70.666	64.110	32.070	1.00	35.49
ATOM	6325	OG1	THR	L	184	70.729	64.239	33.496	1.00	36.29
ATOM	6326	CG2	THR	L	184	71.601	63.004	31.580	1.00	34.90
ATOM	6327	N	LEU	L	185	72.689	67.056	32.164	1.00	44.24
ATOM	6328	CA	LEU	L	185	74.016	67.575	32.455	1.00	45.90
ATOM	6329	C	LEU	L	185	74.308	67.596	33.942	1.00	49.75
ATOM	6330	O	LEU	L	185	73.437	67.332	34.771	1.00	49.58
ATOM	6331	CB	LEU	L	185	74.150	68.990	31.901	1.00	41.99
ATOM	6332	CG	LEU	L	185	73.959	69.094	30.387	1.00	44.70
ATOM	6333	CD1	LEU	L	185	74.505	70.415	29.865	1.00	47.17
ATOM	6334	CD2	LEU	L	185	74.686	67.961	29.717	1.00	45.29
ATOM	6335	N	SER	L	186	75.559	67.889	34.279	1.00	53.64
ATOM	6336	CA	SER	L	186	75.945	67.988	35.681	1.00	56.80
ATOM	6337	C	SER	L	186	75.668	69.440	36.050	1.00	59.28
ATOM	6338	O	SER	L	186	75.972	70.347	35.251	1.00	59.52
ATOM	6339	CB	SER	L	186	77.436	67.709	35.850	1.00	56.25
ATOM	6340	OG	SER	L	186	78.190	68.666	35.129	1.00	59.51
ATOM	6341	N	LYS	L	187	75.089	69.662	37.233	1.00	59.26
ATOM	6342	CA	LYS	L	187	74.784	71.027	37.701	1.00	60.49
ATOM	6343	C	LYS	L	187	75.855	71.999	37.209	1.00	58.40
ATOM	6344	O	LYS	L	187	75.584	73.153	36.843	1.00	50.27
ATOM	6345	CB	LYS	L	187	74.727	71.090	39.231	1.00	60.85
ATOM	6346	CG	LYS	L	187	74.339	72.471	39.739	1.00	62.56
ATOM	6347	CD	LYS	L	187	75.558	73.339	39.991	1.00	64.49
ATOM	6348	CE	LYS	L	187	75.554	73.862	41.434	1.00	67.14
ATOM	6349	NZ	LYS	L	187	74.164	73.997	42.001	1.00	71.39
ATOM	6350	N	ALA	L	188	77.083	71.488	37.222	1.00	59.61
ATOM	6351	CA	ALA	L	188	78.242	72.221	36.764	1.00	60.08
ATOM	6352	C	ALA	L	188	78.029	72.526	35.287	1.00	59.20
ATOM	6353	O	ALA	L	188	77.690	73.647	34.908	1.00	60.44
ATOM	6354	CB	ALA	L	188	79.486	71.369	36.949	1.00	61.42
ATOM	6355	N	ASP	L	189	78.207	71.516	34.454	1.00	57.26
ATOM	6356	CA	ASP	L	189	78.046	71.709	33.030	1.00	59.59
ATOM	6357	C	ASP	L	189	76.847	72.570	32.698	1.00	58.52
ATOM	6358	O	ASP	L	189	76.906	73.447	31.827	1.00	56.11



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ATOM	6359	CB	ASP	L	189	77.919	70.361	32.346	1.00	64.58
ATOM	6360	CG	ASP	L	189	79.260	69.746	32.064	1.00	71.31
ATOM	6361	OD1	ASP	L	189	80.035	69.540	33.036	1.00	74.63
ATOM	6362	OD2	ASP	L	189	79.534	69.481	30.867	1.00	74.84
ATOM	6363	N	TYR	L	190	75.746	72.322	33.393	1.00	56.92
ATOM	6364	CA	TYR	L	190	74.562	73.097	33.112	1.00	57.92
ATOM	6365	C	TYR	L	190	74.823	74.577	33.338	1.00	59.06
ATOM	6366	O	TYR	L	190	74.665	75.394	32.422	1.00	58.60
ATOM	6367	CB	TYR	L	190	73.394	72.630	33.969	1.00	58.40
ATOM	6368	CG	TYR	L	190	72.102	73.360	33.645	1.00	55.72
ATOM	6369	CD1	TYR	L	190	71.635	73.458	32.329	1.00	51.07
ATOM	6370	CD2	TYR	L	190	71.376	74.002	34.652	1.00	52.28
ATOM	6371	CE1	TYR	L	190	70.488	74.184	32.032	1.00	50.63
ATOM	6372	CE2	TYR	L	190	70.234	74.729	34.364	1.00	49.61
ATOM	6373	CZ	TYR	L	190	69.803	74.819	33.058	1.00	49.57
ATOM	6374	OH	TYR	L	190	68.703	75.577	32.774	1.00	51.20
ATOM	6375	N	GLU	L	191	75.235	74.921	34.555	1.00	61.26
ATOM	6376	CA	GLU	L	191	75.529	76.319	34.900	1.00	63.04
ATOM	6377	C	GLU	L	191	76.632	76.877	33.989	1.00	60.73
ATOM	6378	O	GLU	L	191	76.872	78.083	33.933	1.00	57.21
ATOM	6379	CB	GLU	L	191	75.970	76.430	36.372	1.00	67.74
ATOM	6380	CG	GLU	L	191	74.892	76.955	37.339	1.00	74.23
ATOM	6381	CD	GLU	L	191	74.986	76.367	38.756	1.00	77.78
ATOM	6382	OE1	GLU	L	191	73.954	75.867	39.259	1.00	80.33
ATOM	6383	OE2	GLU	L	191	76.078	76.410	39.369	1.00	76.01
ATOM	6384	N	LYS	L	192	77.295	75.082	33.270	1.00	60.30
ATOM	6385	CA	LYS	L	192	78.366	76.368	32.371	1.00	62.20
ATOM	6386	C	LYS	L	192	77.881	76.906	31.024	1.00	61.29
ATOM	6387	O	LYS	L	192	78.665	77.518	30.291	1.00	62.52
ATOM	6388	CB	LYS	L	192	79.307	75.170	32.130	1.00	65.73
ATOM	6389	CG	LYS	L	192	79.140	74.470	30.754	1.00	66.78
ATOM	6390	CD	LYS	L	192	79.948	73.167	30.640	1.00	66.31
ATOM	6391	CE	LYS	L	192	79.201	72.088	29.859	1.00	62.27
ATOM	6392	NZ	LYS	L	192	79.969	71.560	28.679	1.00	60.75
ATOM	6393	N	HIS	L	193	76.611	76.693	30.683	1.00	57.66
ATOM	6394	CA	HIS	L	193	76.129	77.172	29.385	1.00	55.25
ATOM	6395	C	HIS	L	193	74.900	78.091	29.322	1.00	53.42
ATOM	6396	O	HIS	L	193	74.136	78.226	30.279	1.00	53.59
ATOM	6397	CB	HIS	L	193	75.926	75.993	28.450	1.00	55.34
ATOM	6398	CG	HIS	L	193	77.202	75.333	28.038	1.00	56.74
ATOM	6399	ND1	HIS	L	193	78.271	76.031	27.525	1.00	55.66
ATOM	6400	CD2	HIS	L	193	77.584	74.036	28.091	1.00	58.46
ATOM	6401	CE1	HIS	L	193	79.265	75.191	27.284	1.00	59.66
ATOM	6402	NE2	HIS	L	193	78.875	73.976	27.620	1.00	57.96
ATOM	6403	N	LYS	L	194	74.713	78.721	28.167	1.00	48.83
ATOM	6404	CA	LYS	L	194	73.620	79.656	28.014	1.00	48.86
ATOM	6405	C	LYS	L	194	72.354	79.073	27.433	1.00	48.18
ATOM	6406	O	LYS	L	194	71.319	79.015	28.096	1.00	51.85
ATOM	6407	CB	LYS	L	194	74.060	80.850	27.159	1.00	51.99
ATOM	6408	CG	LYS	L	194	72.937	81.853	26.864	1.00	55.92
ATOM	6409	CD	LYS	L	194	72.999	83.085	27.765	1.00	62.65
ATOM	6410	CE	LYS	L	194	73.324	82.729	29.233	1.00	68.19
ATOM	6411	NZ	LYS	L	194	74.797	82.815	29.551	1.00	68.53
ATOM	6412	N	VAL	L	195	72.428	78.633	26.191	1.00	41.26
ATOM	6413	CA	VAL	L	195	71.245	78.123	25.560	1.00	36.92
ATOM	6414	C	VAL	L	195	71.193	76.622	25.352	1.00	36.76
ATOM	6415	O	VAL	L	195	72.094	76.029	24.783	1.00	38.21
ATOM	6416	CB	VAL	L	195	71.017	78.855	24.222	1.00	35.08
ATOM	6417	CG1	VAL	L	195	71.854	80.100	24.192	1.00	28.23
ATOM	6418	CG2	VAL	L	195	71.319	77.931	23.030	1.00	38.16

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ATOM	6419	N	TYR	L	196	70.109	76.017	25.823	1.00	35.73
ATOM	6420	CA	TYR	L	196	69.873	74.590	25.682	1.00	34.93
ATOM	6421	C	TYR	L	196	68.719	74.465	24.709	1.00	36.15
ATOM	6422	O	TYR	L	196	67.743	75.198	24.832	1.00	37.21
ATOM	6423	CB	TYR	L	196	69.507	74.010	27.032	1.00	35.82
ATOM	6424	CG	TYR	L	196	70.699	73.992	27.953	1.00	42.65
ATOM	6425	CD1	TYR	L	196	71.516	72.871	28.025	1.00	46.78
ATOM	6426	CD2	TYR	L	196	71.050	75.113	28.719	1.00	43.58
ATOM	6427	CE1	TYR	L	196	72.658	72.853	28.834	1.00	48.27
ATOM	6428	CE2	TYR	L	196	72.196	75.103	29.535	1.00	45.09
ATOM	6429	CZ	TYR	L	196	72.989	73.959	29.581	1.00	47.43
ATOM	6430	OH	TYR	L	196	74.107	73.888	30.374	1.00	50.12
ATOM	6431	N	ALA	L	197	68.829	73.568	23.730	1.00	35.94
ATOM	6432	CA	ALA	L	197	67.768	73.422	22.732	1.00	31.95
ATOM	6433	C	ALA	L	197	67.587	72.037	22.136	1.00	32.28
ATOM	6434	O	ALA	L	197	68.530	71.434	21.620	1.00	32.90
ATOM	6435	CB	ALA	L	197	67.999	74.398	21.617	1.00	26.94
ATOM	6436	N	CYS	L	198	66.360	71.538	22.209	1.00	31.80
ATOM	6437	CA	CYS	L	198	66.044	70.252	21.630	1.00	30.39
ATOM	6438	C	CYS	L	198	65.366	70.576	20.271	1.00	28.18
ATOM	6439	O	CYS	L	198	64.471	71.426	20.187	1.00	26.32
ATOM	6440	CB	CYS	L	198	65.153	69.440	22.593	1.00	27.10
ATOM	6441	SG	CYS	L	198	63.406	69.514	22.162	1.00	34.88
ATOM	6442	N	GLU	L	199	65.880	69.957	19.207	1.00	26.23
ATOM	6443	CA	GLU	L	199	65.388	70.152	17.845	1.00	27.23
ATOM	6444	C	GLU	L	199	64.790	68.844	17.305	1.00	26.60
ATOM	6445	O	GLU	L	199	65.462	67.803	17.255	1.00	24.63
ATOM	6446	CB	GLU	L	199	66.552	70.620	16.978	1.00	34.59
ATOM	6447	CG	GLU	L	199	66.261	70.800	15.503	1.00	46.30
ATOM	6448	CD	GLU	L	199	67.525	70.674	14.628	1.00	51.58
ATOM	6449	OE1	GLU	L	199	68.496	69.979	15.037	1.00	48.33
ATOM	6450	OE2	GLU	L	199	67.537	71.278	13.521	1.00	57.38
ATOM	6451	N	VAL	L	200	63.506	68.898	16.940	1.00	24.91
ATOM	6452	CA	VAL	L	200	62.797	67.719	16.451	1.00	20.79
ATOM	6453	C	VAL	L	200	62.371	67.780	15.006	1.00	20.10
ATOM	6454	O	VAL	L	200	61.878	68.793	14.519	1.00	18.59
ATOM	6455	CB	VAL	L	200	61.545	67.453	17.290	1.00	18.89
ATOM	6456	CG1	VAL	L	200	61.136	68.737	17.986	1.00	14.97
ATOM	6457	CG2	VAL	L	200	60.415	66.904	16.402	1.00	19.86
ATOM	6458	N	THR	L	201	62.548	66.652	14.339	1.00	18.95
ATOM	6459	CA	THR	L	201	62.204	66.512	12.944	1.00	18.27
ATOM	6460	C	THR	L	201	61.145	65.428	12.895	1.00	17.87
ATOM	6461	O	THR	L	201	61.256	64.413	13.605	1.00	13.66
ATOM	6462	CB	THR	L	201	63.400	66.031	12.171	1.00	19.86
ATOM	6463	OG1	THR	L	201	64.547	66.035	13.041	1.00	29.56
ATOM	6464	CG2	THR	L	201	63.637	66.904	10.961	1.00	21.86
ATOM	6465	N	HIS	L	202	60.145	65.635	12.032	1.00	15.39
ATOM	6466	CA	HIS	L	202	59.040	64.698	11.894	1.00	10.75
ATOM	6467	C	HIS	L	202	58.083	65.062	10.738	1.00	7.96
ATOM	6468	O	HIS	L	202	57.710	66.210	10.559	1.00	12.22
ATOM	6469	CB	HIS	L	202	58.287	64.654	13.241	1.00	15.45
ATOM	6470	CG	HIS	L	202	57.055	63.803	13.229	1.00	17.01
ATOM	6471	ND1	HIS	L	202	56.022	64.016	12.340	1.00	19.13
ATOM	6472	CD2	HIS	L	202	56.699	62.730	13.974	1.00	11.38
ATOM	6473	CE1	HIS	L	202	55.082	63.108	12.531	1.00	16.41
ATOM	6474	NE2	HIS	L	202	55.469	62.318	13.526	1.00	18.50
ATOM	6475	N	GLN	L	203	57.695	64.060	9.964	1.00	3.97
ATOM	6476	CA	GLN	L	203	56.764	64.199	8.834	1.00	2.00
ATOM	6477	C	GLN	L	203	55.745	65.284	8.974	1.00	4.94
ATOM	6478	O	GLN	L	203	55.454	66.026	8.043	1.00	6.66

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ATOM	6479	CB	GLN	L	203	55.994	62.910	8.679	1.00	2.00
ATOM	6480	CG	GLN	L	203	55.476	62.612	7.327	1.00	3.75
ATOM	6481	CD	GLN	L	203	54.773	61.241	7.274	1.00	16.23
ATOM	6482	OE1	GLN	L	203	53.635	61.139	6.818	1.00	24.80
ATOM	6483	NE2	GLN	L	203	55.456	60.184	7.726	1.00	19.23
ATOM	6484	N	GLY	L	204	55.113	65.314	10.131	1.00	7.68
ATOM	6485	CA	GLY	L	204	54.118	66.329	10.345	1.00	12.94
ATOM	6486	C	GLY	L	204	54.715	67.678	10.041	1.00	15.37
ATOM	6487	O	GLY	L	204	54.373	68.307	9.025	1.00	20.10
ATOM	6488	N	LEU	L	205	55.647	68.079	10.914	1.00	16.29
ATOM	6489	CA	LEU	L	205	56.335	69.370	10.837	1.00	13.48
ATOM	6490	C	LEU	L	205	56.787	69.668	9.449	1.00	14.10
ATOM	6491	O	LEU	L	205	57.561	68.919	8.881	1.00	14.96
ATOM	6492	CB	LEU	L	205	57.568	69.372	11.718	1.00	9.22
ATOM	6493	CG	LEU	L	205	57.279	69.683	13.170	1.00	12.33
ATOM	6494	CD1	LEU	L	205	55.984	69.003	13.526	1.00	15.70
ATOM	6495	CD2	LEU	L	205	58.413	69.200	14.084	1.00	12.01
ATOM	6496	N	SER	L	206	56.316	70.768	8.889	1.00	18.87
ATOM	6497	CA	SER	L	206	56.736	71.110	7.541	1.00	21.84
ATOM	6498	C	SER	L	206	58.248	71.225	7.569	1.00	21.90
ATOM	6499	O	SER	L	206	58.900	71.164	6.530	1.00	23.25
ATOM	6500	CB	SER	L	206	56.120	72.448	7.097	1.00	24.48
ATOM	6501	OG	SER	L	206	56.937	73.102	6.138	1.00	26.34
ATOM	6502	N	SER	L	207	58.801	71.395	8.769	1.00	23.44
ATOM	6503	CA	SER	L	207	60.245	71.541	8.929	1.00	27.50
ATOM	6504	C	SER	L	207	60.693	71.499	10.399	1.00	27.95
ATOM	6505	O	SER	L	207	59.918	71.793	11.293	1.00	33.71
ATOM	6506	CB	SER	L	207	60.657	72.868	8.325	1.00	31.08
ATOM	6507	OG	SER	L	207	59.523	73.528	7.781	1.00	33.98
ATOM	6508	N	PRO	L	208	61.965	71.174	10.658	1.00	24.10
ATOM	6509	CA	PRO	L	208	62.511	71.091	12.017	1.00	20.05
ATOM	6510	C	PRO	L	208	62.178	72.218	12.956	1.00	20.06
ATOM	6511	O	PRO	L	208	62.621	73.360	12.824	1.00	23.02
ATOM	6512	CB	PRO	L	208	63.999	70.927	11.798	1.00	17.80
ATOM	6513	CG	PRO	L	208	64.051	70.175	10.499	1.00	20.81
ATOM	6514	CD	PRO	L	208	62.973	70.816	9.650	1.00	23.68
ATOM	6515	N	VAL	L	209	61.349	71.854	13.913	1.00	21.19
ATOM	6516	CA	VAL	L	209	60.899	72.750	14.936	1.00	23.07
ATOM	6517	C	VAL	L	209	61.978	72.710	16.010	1.00	27.01
ATOM	6518	O	VAL	L	209	62.345	71.638	16.506	1.00	28.44
ATOM	6519	CB	VAL	L	209	59.528	72.254	15.518	1.00	18.99
ATOM	6520	CG1	VAL	L	209	59.239	72.912	16.867	1.00	18.87
ATOM	6521	CG2	VAL	L	209	58.419	72.543	14.551	1.00	13.80
ATOM	6522	N	THR	L	210	62.518	73.869	16.353	1.00	29.81
ATOM	6523	CA	THR	L	210	63.521	73.893	17.414	1.00	31.44
ATOM	6524	C	THR	L	210	62.867	74.528	18.636	1.00	31.65
ATOM	6525	O	THR	L	210	62.053	75.438	18.493	1.00	33.66
ATOM	6526	CB	THR	L	210	64.757	74.755	17.028	1.00	27.86
ATOM	6527	OG1	THR	L	210	65.461	74.151	15.938	1.00	23.82
ATOM	6528	CG2	THR	L	210	65.699	74.889	18.214	1.00	24.54
ATOM	6529	N	LYS	L	211	63.223	74.077	19.828	1.00	30.19
ATOM	6530	CA	LYS	L	211	62.651	74.682	21.025	1.00	34.62
ATOM	6531	C	LYS	L	211	63.793	74.914	22.003	1.00	37.39
ATOM	6532	O	LYS	L	211	64.369	73.967	22.547	1.00	42.55
ATOM	6533	CB	LYS	L	211	61.585	73.771	21.645	1.00	36.71
ATOM	6534	CG	LYS	L	211	60.477	74.497	22.425	1.00	40.51
ATOM	6535	CD	LYS	L	211	59.341	74.994	21.511	1.00	42.99
ATOM	6536	CE	LYS	L	211	58.043	75.268	22.290	1.00	44.90
ATOM	6537	NZ	LYS	L	211	58.063	76.490	23.187	1.00	46.03
ATOM	6538	N	SER	L	212	64.117	76.179	22.239	1.00	35.89

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ATOM	6539	CA	SER	L	212	65.227	76.512	23.111	1.00	32.68
ATOM	6540	C	SER	L	212	64.875	77.461	24.211	1.00	32.28
ATOM	6541	O	SER	L	212	63.798	78.031	24.243	1.00	32.97
ATOM	6542	CB	SER	L	212	66.308	77.162	22.287	1.00	37.16
ATOM	6543	OG	SER	L	212	65.713	78.027	21.327	1.00	37.55
ATOM	6544	N	PHE	L	213	65.822	77.652	25.105	1.00	34.79
ATOM	6545	CA	PHE	L	213	65.645	78.568	26.215	1.00	40.69
ATOM	6546	C	PHE	L	213	67.036	78.863	26.727	1.00	46.49
ATOM	6547	O	PHE	L	213	67.977	78.126	26.431	1.00	48.68
ATOM	6548	CB	PHE	L	213	64.776	77.942	27.327	1.00	37.05
ATOM	6549	CG	PHE	L	213	65.509	76.969	28.222	1.00	34.10
ATOM	6550	CD1	PHE	L	213	65.410	75.595	28.002	1.00	38.83
ATOM	6551	CD2	PHE	L	213	66.305	77.427	29.260	1.00	31.56
ATOM	6552	CE1	PHE	L	213	66.097	74.689	28.795	1.00	39.92
ATOM	6553	CE2	PHE	L	213	67.001	76.546	30.060	1.00	34.33
ATOM	6554	CZ	PHE	L	213	66.901	75.166	29.831	1.00	40.98
ATOM	6555	N	ASN	L	214	67.165	79.936	27.497	1.00	51.61
ATOM	6556	CA	ASN	L	214	68.449	80.312	28.069	1.00	55.27
ATOM	6557	C	ASN	L	214	68.333	80.364	29.582	1.00	56.89
ATOM	6558	O	ASN	L	214	67.322	80.821	30.105	1.00	58.12
ATOM	6559	CB	ASN	L	214	68.863	81.664	27.525	1.00	60.09
ATOM	6560	CG	ASN	L	214	68.974	81.658	26.016	1.00	67.01
ATOM	6561	OD1	ASN	L	214	68.002	81.338	25.310	1.00	67.23
ATOM	6562	ND2	ASN	L	214	70.164	82.003	25.505	1.00	70.05
ATOM	6563	N	ARG	L	215	69.359	79.891	30.283	1.00	58.33
ATOM	6564	CA	ARG	L	215	69.332	79.392	31.739	1.00	62.17
ATOM	6565	C	ARG	L	215	68.962	81.283	32.277	1.00	64.50
ATOM	6566	O	ARG	L	215	69.372	82.296	31.657	1.00	66.38
ATOM	6567	CB	ARG	L	215	70.696	79.468	32.292	1.00	63.52
ATOM	6568	CG	ARG	L	215	71.499	78.535	31.388	1.00	65.10
ATOM	6569	CD	ARG	L	215	72.485	77.728	32.220	1.00	68.68
ATOM	6570	NE	ARG	L	215	73.563	78.578	32.713	1.00	74.05
ATOM	6571	CZ	ARG	L	215	73.546	79.216	33.881	1.00	77.82
ATOM	6572	NH1	ARG	L	215	72.501	79.104	34.699	1.00	78.37
ATOM	6573	NH2	ARG	L	215	74.578	79.977	34.232	1.00	80.06
ATOM	6574	OT	ARG	L	215	68.263	81.345	33.314	1.00	66.11
ATOM	6575	N	GLN	K	1	112.568	17.707	32.546	1.00	53.56
ATOM	6576	CA	GLN	K	1	112.968	16.483	31.770	1.00	51.30
ATOM	6577	C	GLN	K	1	111.908	15.389	31.935	1.00	44.53
ATOM	6578	O	GLN	K	1	111.522	15.075	33.071	1.00	50.55
ATOM	6579	CB	GLN	K	1	114.333	15.955	32.271	1.00	60.35
ATOM	6580	CG	GLN	K	1	115.178	16.941	33.139	1.00	66.66
ATOM	6581	CD	GLN	K	1	116.660	16.932	32.766	1.00	69.02
ATOM	6582	OE1	GLN	K	1	117.535	16.900	33.634	1.00	68.46
ATOM	6583	NE2	GLN	K	1	116.940	16.955	31.462	1.00	70.09
ATOM	6584	N	VAL	K	2	111.446	14.794	30.838	1.00	29.97
ATOM	6585	CA	VAL	K	2	110.429	13.748	30.954	1.00	20.19
ATOM	6586	C	VAL	K	2	111.076	12.415	31.305	1.00	20.37
ATOM	6587	O	VAL	K	2	111.749	11.826	30.465	1.00	24.40
ATOM	6588	CB	VAL	K	2	109.691	13.576	29.645	1.00	17.74
ATOM	6589	CG1	VAL	K	2	110.687	13.736	28.519	1.00	24.15
ATOM	6590	CG2	VAL	K	2	108.973	12.207	29.587	1.00	8.84
ATOM	6591	N	GLN	K	3	110.877	11.906	32.517	1.00	15.61
ATOM	6592	CA	GLN	K	3	111.504	10.641	32.832	1.00	18.09
ATOM	6593	C	GLN	K	3	110.638	9.539	33.477	1.00	18.88
ATOM	6594	O	GLN	K	3	109.614	9.809	34.088	1.00	23.49
ATOM	6595	CB	GLN	K	3	112.780	10.901	33.648	1.00	22.53
ATOM	6596	CG	GLN	K	3	112.598	11.502	35.038	1.00	36.03
ATOM	6597	CD	GLN	K	3	113.863	11.401	35.930	1.00	40.83
ATOM	6598	OE1	GLN	K	3	114.924	10.961	35.480	1.00	42.40

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ATOM	6599	NE2	GLN	K	3	113.737	11.807	37.201	1.00	41.49
ATOM	6600	N	LEU	K	4	111.035	8.283	33.294	1.00	15.58
ATOM	6601	CA	LEU	K	4	110.327	7.145	33.867	1.00	9.36
ATOM	6602	C	LEU	K	4	111.301	6.364	34.710	1.00	10.52
ATOM	6603	O	LEU	K	4	112.245	5.796	34.192	1.00	18.66
ATOM	6604	CB	LEU	K	4	109.853	6.197	32.786	1.00	6.61
ATOM	6605	CG	LEU	K	4	108.924	6.704	31.714	1.00	10.23
ATOM	6606	CD1	LEU	K	4	108.461	5.469	30.885	1.00	6.06
ATOM	6607	CD2	LEU	K	4	107.809	7.502	32.350	1.00	9.33
ATOM	6608	N	VAL	K	5	111.062	6.252	35.996	1.00	6.56
ATOM	6609	CA	VAL	K	5	111.998	5.508	36.818	1.00	7.41
ATOM	6610	C	VAL	K	5	111.584	4.131	37.325	1.00	6.14
ATOM	6611	O	VAL	K	5	111.016	4.029	38.389	1.00	11.98
ATOM	6612	CB	VAL	K	5	112.373	6.367	37.984	1.00	6.83
ATOM	6613	CG1	VAL	K	5	113.487	5.759	38.778	1.00	4.49
ATOM	6614	CG2	VAL	K	5	112.776	7.704	37.441	1.00	7.61
ATOM	6615	N	GLN	K	6	111.942	3.068	36.612	1.00	4.95
ATOM	6616	CA	GLN	K	6	111.562	1.703	37.007	1.00	6.70
ATOM	6617	C	GLN	K	6	112.096	1.327	38.385	1.00	6.76
ATOM	6618	O	GLN	K	6	112.935	2.004	38.940	1.00	7.25
ATOM	6619	CB	GLN	K	6	112.075	0.680	35.978	1.00	8.88
ATOM	6620	CG	GLN	K	6	111.038	-0.205	35.324	1.00	14.46
ATOM	6621	CD	GLN	K	6	111.116	-0.237	33.801	1.00	18.35
ATOM	6622	OE1	GLN	K	6	111.615	0.690	33.147	1.00	17.00
ATOM	6623	NE2	GLN	K	6	110.596	-1.317	33.230	1.00	21.93
ATOM	6624	N	SER	K	7	111.602	0.222	38.918	1.00	11.06
ATOM	6625	CA	SER	K	7	111.994	-0.283	40.235	1.00	10.46
ATOM	6626	C	SER	K	7	113.235	-1.142	40.206	1.00	9.61
ATOM	6627	O	SER	K	7	113.728	-1.513	39.133	1.00	12.24
ATOM	6628	CB	SER	K	7	110.868	-1.142	40.806	1.00	12.56
ATOM	6629	OG	SER	K	7	110.989	-2.521	40.420	1.00	23.23
ATOM	6630	N	GLY	K	8	113.652	-1.556	41.401	1.00	9.16
ATOM	6631	CA	GLY	K	8	114.840	-2.389	41.547	1.00	9.15
ATOM	6632	C	GLY	K	8	114.757	-3.780	40.967	1.00	4.94
ATOM	6633	O	GLY	K	8	113.684	-4.293	40.747	1.00	5.86
ATOM	6634	N	ALA	K	9	115.898	-4.392	40.698	1.00	9.43
ATOM	6635	CA	ALA	K	9	115.911	-5.755	40.136	1.00	16.23
ATOM	6636	C	ALA	K	9	115.253	-6.738	41.076	1.00	14.22
ATOM	6637	O	ALA	K	9	115.218	-6.511	42.265	1.00	17.80
ATOM	6638	CB	ALA	K	9	117.382	-6.219	39.828	1.00	16.99
ATOM	6639	N	GLU	K	10	114.769	-7.851	40.566	1.00	16.40
ATOM	6640	CA	GLU	K	10	114.125	-8.815	41.444	1.00	22.08
ATOM	6641	C	GLU	K	10	114.550	-10.248	41.154	1.00	23.67
ATOM	6642	O	GLU	K	10	114.562	-10.697	39.994	1.00	29.46
ATOM	6643	CB	GLU	K	10	112.619	-8.711	41.266	1.00	29.21
ATOM	6644	CG	GLU	K	10	111.850	-8.198	42.455	1.00	38.15
ATOM	6645	CD	GLU	K	10	111.434	-6.733	42.292	1.00	49.18
ATOM	6646	OE1	GLU	K	10	111.256	-6.276	41.133	1.00	47.26
ATOM	6647	OE2	GLU	K	10	111.285	-6.031	43.330	1.00	56.10
ATOM	6648	N	VAL	K	11	114.896	-10.988	42.193	1.00	23.25
ATOM	6649	CA	VAL	K	11	115.298	-12.381	41.986	1.00	27.60
ATOM	6650	C	VAL	K	11	114.197	-13.224	42.634	1.00	30.36
ATOM	6651	O	VAL	K	11	113.911	-13.086	43.814	1.00	33.68
ATOM	6652	CB	VAL	K	11	116.720	-12.709	42.622	1.00	23.12
ATOM	6653	CG1	VAL	K	11	117.470	-13.719	41.772	1.00	19.05
ATOM	6654	CG2	VAL	K	11	117.559	-11.465	42.731	1.00	16.13
ATOM	6655	N	VAL	K	12	113.575	-14.106	41.874	1.00	30.35
ATOM	6656	CA	VAL	K	12	112.499	-14.865	42.449	1.00	29.88
ATOM	6657	C	VAL	K	12	112.442	-16.286	41.972	1.00	31.38
ATOM	6658	O	VAL	K	12	112.749	-16.555	40.815	1.00	35.50

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ATOM	6659	CB	VAL	K	12	111.188	-14.235	42.094	1.00	32.37
ATOM	6660	CG1	VAL	K	12	110.978	-14.282	40.575	1.00	33.90
ATOM	6661	CG2	VAL	K	12	110.086	-14.992	42.776	1.00	40.35
ATOM	6662	N	LYS	K	13	112.000	-17.176	42.859	1.00	28.82
ATOM	6663	CA	LYS	K	13	111.874	-18.601	42.571	1.00	27.70
ATOM	6664	C	LYS	K	13	110.723	-18.796	41.640	1.00	24.52
ATOM	6665	O	LYS	K	13	109.784	-18.023	41.648	1.00	24.31
ATOM	6666	CB	LYS	K	13	111.626	-19.389	43.840	1.00	29.94
ATOM	6667	CG	LYS	K	13	111.586	-18.509	45.066	1.00	40.93
ATOM	6668	CD	LYS	K	13	110.348	-17.599	45.056	1.00	46.55
ATOM	6669	CE	LYS	K	13	110.600	-16.290	45.786	1.00	47.03
ATOM	6670	NZ	LYS	K	13	112.009	-15.834	45.652	1.00	52.71
ATOM	6671	N	PRO	K	14	110.788	-19.825	40.808	1.00	24.59
ATOM	6672	CA	PRO	K	14	109.734	-20.127	39.835	1.00	26.90
ATOM	6673	C	PRO	K	14	108.395	-20.193	40.497	1.00	28.27
ATOM	6674	O	PRO	K	14	108.312	-20.367	41.700	1.00	32.40
ATOM	6675	CB	PRO	K	14	110.133	-21.483	39.270	1.00	28.12
ATOM	6676	CG	PRO	K	14	111.621	-21.541	39.447	1.00	30.33
ATOM	6677	CD	PRO	K	14	111.903	-20.782	40.741	1.00	25.77
ATOM	6678	N	GLY	K	15	107.334	-20.069	39.721	1.00	28.56
ATOM	6679	CA	GLY	K	15	106.026	-20.143	40.328	1.00	26.48
ATOM	6680	C	GLY	K	15	105.605	-18.911	41.090	1.00	23.49
ATOM	6681	O	GLY	K	15	104.427	-18.626	41.142	1.00	30.37
ATOM	6682	N	ALA	K	16	106.541	-18.167	41.661	1.00	22.02
ATOM	6683	CA	ALA	K	16	106.199	-16.958	42.406	1.00	21.41
ATOM	6684	C	ALA	K	16	105.601	-15.880	41.503	1.00	23.45
ATOM	6685	O	ALA	K	16	105.222	-16.125	40.355	1.00	27.62
ATOM	6686	CB	ALA	K	16	107.417	-16.416	43.052	1.00	19.75
ATOM	6687	N	SER	K	17	105.506	-14.672	42.027	1.00	22.42
ATOM	6688	CA	SER	K	17	104.990	-13.588	41.228	1.00	27.29
ATOM	6689	C	SER	K	17	105.635	-12.320	41.719	1.00	28.38
ATOM	6690	O	SER	K	17	105.979	-12.196	42.881	1.00	30.51
ATOM	6691	CB	SER	K	17	103.482	-13.524	41.333	1.00	35.79
ATOM	6692	OG	SER	K	17	102.907	-14.625	40.638	1.00	45.45
ATOM	6693	N	VAL	K	18	105.829	-11.379	40.817	1.00	27.78
ATOM	6694	CA	VAL	K	18	106.503	-10.151	41.168	1.00	25.40
ATOM	6695	C	VAL	K	18	105.715	-8.946	40.627	1.00	24.88
ATOM	6696	O	VAL	K	18	105.031	-9.038	39.584	1.00	26.16
ATOM	6697	CB	VAL	K	18	107.936	-10.208	40.576	1.00	25.22
ATOM	6698	CG1	VAL	K	18	107.863	-10.524	39.078	1.00	24.67
ATOM	6699	CG2	VAL	K	18	108.653	-8.895	40.794	1.00	28.85
ATOM	6700	N	LYS	K	19	105.814	-7.813	41.317	1.00	16.44
ATOM	6701	CA	LYS	K	19	105.066	-6.659	40.882	1.00	13.41
ATOM	6702	C	LYS	K	19	105.954	-5.468	40.555	1.00	16.13
ATOM	6703	O	LYS	K	19	106.382	-4.730	41.441	1.00	17.76
ATOM	6704	CB	LYS	K	19	104.053	-6.309	41.965	1.00	12.45
ATOM	6705	CG	LYS	K	19	102.895	-5.461	41.504	1.00	16.23
ATOM	6706	CD	LYS	K	19	102.720	-4.219	42.361	1.00	26.19
ATOM	6707	CE	LYS	K	19	101.227	-3.862	42.467	1.00	40.64
ATOM	6708	NZ	LYS	K	19	100.889	-2.651	43.301	1.00	46.57
ATOM	6709	N	LEU	K	20	106.250	-5.289	39.274	1.00	14.27
ATOM	6710	CA	LEU	K	20	107.094	-4.196	38.869	1.00	9.88
ATOM	6711	C	LEU	K	20	106.383	-2.892	38.879	1.00	11.52
ATOM	6712	O	LEU	K	20	105.235	-2.824	38.496	1.00	12.20
ATOM	6713	CB	LEU	K	20	107.634	-4.452	37.473	1.00	6.05
ATOM	6714	CG	LEU	K	20	108.827	-5.406	37.397	1.00	5.70
ATOM	6715	CD1	LEU	K	20	108.742	-6.530	38.431	1.00	2.00
ATOM	6716	CD2	LEU	K	20	108.871	-5.981	35.979	1.00	10.09
ATOM	6717	N	SER	K	21	107.094	-1.848	39.272	1.00	13.90
ATOM	6718	CA	SER	K	21	106.537	-0.511	39.267	1.00	18.24

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ATOM	6719	C	SER	K	21	107.343	0.416	38.328	1.00	20.43
ATOM	6720	O	SER	K	21	108.528	0.176	38.065	1.00	21.29
ATOM	6721	CB	SER	K	21	106.615	0.087	40.652	1.00	20.71
ATOM	6722	OG	SER	K	21	107.421	1.260	40.622	1.00	29.18
ATOM	6723	N	CYS	K	22	106.711	1.494	37.870	1.00	18.68
ATOM	6724	CA	CYS	K	22	107.348	2.493	37.007	1.00	18.59
ATOM	6725	C	CYS	K	22	106.729	3.892	37.304	1.00	20.58
ATOM	6726	O	CYS	K	22	105.545	4.160	37.081	1.00	17.93
ATOM	6727	CB	CYS	K	22	107.182	2.100	35.526	1.00	19.96
ATOM	6728	SG	CYS	K	22	107.335	3.441	34.303	1.00	21.71
ATOM	6729	N	LYS	K	23	107.550	4.801	37.787	1.00	20.19
ATOM	6730	CA	LYS	K	23	107.061	6.113	38.131	1.00	20.63
ATOM	6731	C	LYS	K	23	107.427	7.160	37.086	1.00	22.88
ATOM	6732	O	LYS	K	23	108.596	7.526	36.942	1.00	27.07
ATOM	6733	CB	LYS	K	23	107.656	6.487	39.467	1.00	26.12
ATOM	6734	CG	LYS	K	23	107.318	7.877	39.930	1.00	35.74
ATOM	6735	CD	LYS	K	23	107.374	7.959	41.462	1.00	43.54
ATOM	6736	CE	LYS	K	23	106.888	9.322	41.985	1.00	44.03
ATOM	6737	NZ	LYS	K	23	107.950	10.367	41.940	1.00	41.60
ATOM	6738	N	ALA	K	24	106.432	7.654	36.363	1.00	22.98
ATOM	6739	CA	ALA	K	24	106.653	8.680	35.329	1.00	23.79
ATOM	6740	C	ALA	K	24	106.776	10.059	35.947	1.00	20.75
ATOM	6741	O	ALA	K	24	106.448	10.238	37.107	1.00	23.77
ATOM	6742	CB	ALA	K	24	105.488	8.696	34.310	1.00	21.72
ATOM	6743	N	SER	K	25	107.224	11.031	35.161	1.00	16.67
ATOM	6744	CA	SER	K	25	107.349	12.388	35.640	1.00	14.86
ATOM	6745	C	SER	K	25	107.865	13.253	34.506	1.00	15.72
ATOM	6746	O	SER	K	25	108.409	12.747	33.533	1.00	20.98
ATOM	6747	CB	SER	K	25	108.296	12.421	36.822	1.00	13.94
ATOM	6748	OG	SER	K	25	109.619	12.618	36.395	1.00	26.69
ATOM	6749	N	GLY	K	26	107.650	14.553	34.601	1.00	13.03
ATOM	6750	CA	GLY	K	26	108.133	15.435	33.562	1.00	14.11
ATOM	6751	C	GLY	K	26	107.115	15.711	32.481	1.00	15.76
ATOM	6752	O	GLY	K	26	107.357	16.495	31.548	1.00	17.53
ATOM	6753	N	TYR	K	27	105.955	15.083	32.621	1.00	17.38
ATOM	6754	CA	TYR	K	27	104.871	15.258	31.665	1.00	19.54
ATOM	6755	C	TYR	K	27	103.481	14.937	32.271	1.00	19.99
ATOM	6756	O	TYR	K	27	103.361	14.526	33.431	1.00	22.36
ATOM	6757	CB	TYR	K	27	105.136	14.393	30.436	1.00	15.22
ATOM	6758	CG	TYR	K	27	105.022	12.916	30.699	1.00	12.77
ATOM	6759	CD1	TYR	K	27	105.986	12.251	31.449	1.00	11.66
ATOM	6760	CD2	TYR	K	27	103.948	12.162	30.162	1.00	14.75
ATOM	6761	CE1	TYR	K	27	105.884	10.877	31.658	1.00	14.56
ATOM	6762	CE2	TYR	K	27	103.841	10.779	30.365	1.00	9.19
ATOM	6763	CZ	TYR	K	27	104.807	10.160	31.110	1.00	12.16
ATOM	6764	OH	TYR	K	27	104.698	8.823	31.326	1.00	14.74
ATOM	6765	N	ILE	K	28	102.415	15.146	31.517	1.00	18.85
ATOM	6766	CA	ILE	K	28	101.100	14.830	32.071	1.00	19.78
ATOM	6767	C	ILE	K	28	100.924	13.316	31.956	1.00	20.22
ATOM	6768	O	ILE	K	28	100.701	12.778	30.865	1.00	21.48
ATOM	6769	CB	ILE	K	28	99.995	15.548	31.288	1.00	21.88
ATOM	6770	CG1	ILE	K	28	99.928	16.999	31.731	1.00	24.41
ATOM	6771	CG2	ILE	K	28	98.653	14.905	31.505	1.00	22.91
ATOM	6772	CD1	ILE	K	28	99.178	17.856	30.730	1.00	29.12
ATOM	6773	N	PHE	K	29	100.993	12.646	33.097	1.00	14.97
ATOM	6774	CA	PHE	K	29	100.902	11.205	33.169	1.00	14.31
ATOM	6775	C	PHE	K	29	99.793	10.536	32.371	1.00	20.27
ATOM	6776	O	PHE	K	29	100.052	9.570	31.628	1.00	27.29
ATOM	6777	CB	PHE	K	29	100.751	10.815	34.612	1.00	11.23
ATOM	6778	CG	PHE	K	29	100.832	9.361	34.847	1.00	8.64

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ATOM	6779	CD1	PHE	K	29	101.925	8.652	34.413	1.00	9.74
ATOM	6780	CD2	PHE	K	29	99.859	8.700	35.583	1.00	12.03
ATOM	6781	CE1	PHE	K	29	102.061	7.278	34.725	1.00	14.88
ATOM	6782	CE2	PHE	K	29	99.983	7.301	35.905	1.00	16.11
ATOM	6783	CZ	PHE	K	29	101.083	6.594	35.480	1.00	11.07
ATOM	6784	N	THR	K	30	98.565	11.024	32.557	1.00	20.82
ATOM	6785	CA	THR	K	30	97.364	10.479	31.904	1.00	18.81
ATOM	6786	C	THR	K	30	97.241	10.662	30.422	1.00	17.45
ATOM	6787	O	THR	K	30	96.413	10.015	29.780	1.00	15.55
ATOM	6788	CB	THR	K	30	96.108	11.085	32.488	1.00	15.70
ATOM	6789	OG1	THR	K	30	95.884	12.388	31.913	1.00	10.50
ATOM	6790	CG2	THR	K	30	96.251	11.172	33.982	1.00	11.75
ATOM	6791	N	SER	K	31	98.051	11.543	29.866	1.00	14.97
ATOM	6792	CA	SER	K	31	97.920	11.758	28.457	1.00	14.30
ATOM	6793	C	SER	K	31	98.757	10.835	27.596	1.00	12.18
ATOM	6794	O	SER	K	31	98.812	11.037	26.389	1.00	15.20
ATOM	6795	CB	SER	K	31	98.204	13.219	28.116	1.00	21.02
ATOM	6796	OG	SER	K	31	97.605	14.067	29.090	1.00	30.34
ATOM	6797	N	TYR	K	32	99.370	9.804	28.179	1.00	8.89
ATOM	6798	CA	TYR	K	32	100.201	8.915	27.372	1.00	7.04
ATOM	6799	C	TYR	K	32	100.019	7.480	27.714	1.00	7.79
ATOM	6800	O	TYR	K	32	100.057	7.115	28.886	1.00	10.38
ATOM	6801	CB	TYR	K	32	101.677	9.256	27.556	1.00	6.27
ATOM	6802	CG	TYR	K	32	102.017	10.578	26.951	1.00	7.98
ATOM	6803	CD1	TYR	K	32	102.145	10.709	25.558	1.00	7.87
ATOM	6804	CD2	TYR	K	32	102.006	11.732	27.732	1.00	6.98
ATOM	6805	CE1	TYR	K	32	102.221	11.940	24.972	1.00	8.08
ATOM	6806	CE2	TYR	K	32	102.085	12.962	27.157	1.00	6.92
ATOM	6807	CZ	TYR	K	32	102.176	13.061	25.783	1.00	8.91
ATOM	6808	OH	TYR	K	32	102.122	14.311	25.238	1.00	21.32
ATOM	6809	N	TYR	K	33	99.848	6.658	26.694	1.00	5.59
ATOM	6810	CA	TYR	K	33	99.686	5.247	26.944	1.00	6.73
ATOM	6811	C	TYR	K	33	101.037	4.696	27.378	1.00	7.35
ATOM	6812	O	TYR	K	33	102.028	4.907	26.737	1.00	14.76
ATOM	6813	CB	TYR	K	33	99.205	4.542	25.675	1.00	10.37
ATOM	6814	CG	TYR	K	33	97.696	4.435	25.588	1.00	11.25
ATOM	6815	CD1	TYR	K	33	96.917	5.590	25.509	1.00	9.95
ATOM	6816	CD2	TYR	K	33	97.049	3.195	25.623	1.00	7.93
ATOM	6817	CE1	TYR	K	33	95.566	5.531	25.471	1.00	11.98
ATOM	6818	CE2	TYR	K	33	95.670	3.125	25.587	1.00	11.49
ATOM	6819	CZ	TYR	K	33	94.943	4.303	25.514	1.00	16.21
ATOM	6820	OH	TYR	K	33	93.576	4.283	25.510	1.00	27.44
ATOM	6821	N	MET	K	34	101.088	4.003	28.488	1.00	6.43
ATOM	6822	CA	MET	K	34	102.327	3.457	28.954	1.00	2.00
ATOM	6823	C	MET	K	34	102.403	2.030	28.467	1.00	2.00
ATOM	6824	O	MET	K	34	101.514	1.272	28.716	1.00	3.19
ATOM	6825	CB	MET	K	34	102.310	3.487	30.473	1.00	4.89
ATOM	6826	CG	MET	K	34	103.630	3.202	31.129	1.00	14.81
ATOM	6827	SD	MET	K	34	104.889	4.327	30.529	1.00	30.26
ATOM	6828	CE	MET	K	34	104.991	5.510	31.886	1.00	17.60
ATOM	6829	N	TYR	K	35	103.465	1.659	27.775	1.00	2.49
ATOM	6830	CA	TYR	K	35	103.651	0.285	27.326	1.00	2.00
ATOM	6831	C	TYR	K	35	104.579	-0.482	28.264	1.00	2.00
ATOM	6832	O	TYR	K	35	105.094	0.019	29.237	1.00	3.03
ATOM	6833	CB	TYR	K	35	104.357	0.233	26.006	1.00	2.00
ATOM	6834	CG	TYR	K	35	103.584	0.614	24.805	1.00	7.10
ATOM	6835	CD1	TYR	K	35	102.386	1.295	24.907	1.00	9.98
ATOM	6836	CD2	TYR	K	35	104.124	0.417	23.549	1.00	4.82
ATOM	6837	CE1	TYR	K	35	101.758	1.792	23.776	1.00	11.38
ATOM	6838	CE2	TYR	K	35	103.506	0.912	22.421	1.00	12.89



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ATOM	6839	CZ	TYR	K	35	102.321	1.617	22.536	1.00	9.08
ATOM	6840	OH	TYR	K	35	101.754	2.220	21.425	1.00	5.65
ATOM	6841	N	TRP	K	36	104.834	-1.720	27.938	1.00	2.00
ATOM	6842	CA	TRP	K	36	105.758	-2.491	28.745	1.00	9.19
ATOM	6843	C	TRP	K	36	106.394	-3.432	27.721	1.00	17.77
ATOM	6844	O	TRP	K	36	105.703	-4.093	26.913	1.00	22.05
ATOM	6845	CB	TRP	K	36	105.034	-3.297	29.852	1.00	12.14
ATOM	6846	CG	TRP	K	36	104.520	-2.477	31.003	1.00	8.31
ATOM	6847	CD1	TRP	K	36	103.437	-1.657	30.987	1.00	15.05
ATOM	6848	CD2	TRP	K	36	105.151	-2.269	32.265	1.00	3.89
ATOM	6849	NE1	TRP	K	36	103.355	-0.945	32.158	1.00	14.12
ATOM	6850	CE2	TRP	K	36	104.409	-1.293	32.958	1.00	5.88
ATOM	6851	CE3	TRP	K	36	106.275	-2.800	32.876	1.00	7.55
ATOM	6852	CZ2	TRP	K	36	104.758	-0.833	34.226	1.00	2.81
ATOM	6853	CZ3	TRP	K	36	106.624	-2.349	34.135	1.00	8.51
ATOM	6854	CH2	TRP	K	36	105.866	-1.370	34.799	1.00	4.95
ATOM	6855	N	VAL	K	37	107.718	-3.490	27.751	1.00	19.83
ATOM	6856	CA	VAL	K	37	108.457	-4.311	26.814	1.00	15.56
ATOM	6857	C	VAL	K	37	109.357	-5.259	27.542	1.00	14.72
ATOM	6858	O	VAL	K	37	109.973	-4.870	28.520	1.00	14.86
ATOM	6859	CB	VAL	K	37	109.299	-3.419	25.931	1.00	15.50
ATOM	6860	CG1	VAL	K	37	109.925	-4.265	24.771	1.00	16.57
ATOM	6861	CG2	VAL	K	37	108.402	-2.224	25.441	1.00	7.39
ATOM	6862	N	LYS	K	38	109.423	-6.509	27.091	1.00	15.99
ATOM	6863	CA	LYS	K	38	110.308	-7.485	27.728	1.00	15.76
ATOM	6864	C	LYS	K	38	111.381	-7.703	26.710	1.00	15.31
ATOM	6865	O	LYS	K	38	111.109	-7.617	25.511	1.00	10.94
ATOM	6866	CB	LYS	K	38	109.577	-8.804	28.036	1.00	18.60
ATOM	6867	CG	LYS	K	38	110.207	-10.078	27.500	1.00	21.34
ATOM	6868	CD	LYS	K	38	110.317	-11.153	28.595	1.00	25.40
ATOM	6869	CE	LYS	K	38	109.285	-12.296	28.480	1.00	27.53
ATOM	6870	NZ	LYS	K	38	108.691	-12.708	29.837	1.00	28.94
ATOM	6871	N	GLN	K	39	112.603	-7.903	27.208	1.00	18.91
ATOM	6872	CA	GLN	K	39	113.813	-8.176	26.389	1.00	20.32
ATOM	6873	C	GLN	K	39	114.614	-9.243	27.144	1.00	20.28
ATOM	6874	O	GLN	K	39	115.236	-8.968	28.182	1.00	17.07
ATOM	6875	CB	GLN	K	39	114.702	-6.925	26.196	1.00	16.81
ATOM	6876	CG	GLN	K	39	116.125	-7.267	25.648	1.00	14.01
ATOM	6877	CD	GLN	K	39	116.747	-6.241	24.670	1.00	10.17
ATOM	6878	OE1	GLN	K	39	117.124	-5.145	25.082	1.00	2.00
ATOM	6879	NE2	GLN	K	39	116.882	-6.624	23.377	1.00	13.20
ATOM	6880	N	ALA	K	40	114.621	-10.454	26.617	1.00	20.52
ATOM	6881	CA	ALA	K	40	115.301	-11.510	27.330	1.00	28.32
ATOM	6882	C	ALA	K	40	116.691	-11.759	26.826	1.00	35.63
ATOM	6883	O	ALA	K	40	116.977	-11.562	25.649	1.00	38.14
ATOM	6884	CB	ALA	K	40	114.499	-12.779	27.257	1.00	32.70
ATOM	6885	N	PRO	K	41	117.582	-12.217	27.714	1.00	41.73
ATOM	6886	CA	PRO	K	41	118.966	-12.488	27.316	1.00	44.47
ATOM	6887	C	PRO	K	41	119.018	-13.031	25.912	1.00	44.60
ATOM	6888	O	PRO	K	41	118.488	-14.107	25.633	1.00	45.90
ATOM	6889	CB	PRO	K	41	119.422	-13.487	28.353	1.00	44.16
ATOM	6890	CG	PRO	K	41	118.687	-12.999	29.597	1.00	43.15
ATOM	6891	CD	PRO	K	41	117.353	-12.523	29.136	1.00	40.90
ATOM	6892	N	GLY	K	42	119.628	-12.257	25.028	1.00	46.44
ATOM	6893	CA	GLY	K	42	119.726	-12.658	23.639	1.00	55.53
ATOM	6894	C	GLY	K	42	118.399	-12.522	22.912	1.00	59.52
ATOM	6895	O	GLY	K	42	118.361	-12.170	21.719	1.00	62.08
ATOM	6896	N	GLN	K	43	117.310	-12.827	23.620	1.00	58.87
ATOM	6897	CA	GLN	K	43	115.984	-12.715	23.050	1.00	56.82
ATOM	6898	C	GLN	K	43	115.747	-11.219	22.745	1.00	56.18

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ATOM	6899	O	GLN	K	43	116.375	-10.336	23.360	1.00	56.62
ATOM	6900	CB	GLN	K	43	114.961	-13.260	24.043	1.00	58.97
ATOM	6901	CG	GLN	K	43	113.652	-13.660	23.426	1.00	64.99
ATOM	6902	CD	GLN	K	43	113.694	-13.610	21.921	1.00	66.93
ATOM	6903	OE1	GLN	K	43	114.403	-14.405	21.298	1.00	68.33
ATOM	6904	NE2	GLN	K	43	112.936	-12.674	21.320	1.00	64.36
ATOM	6905	N	GLY	K	44	114.877	-10.945	21.769	1.00	50.51
ATOM	6906	CA	GLY	K	44	114.604	-9.576	21.376	1.00	41.92
ATOM	6907	C	GLY	K	44	113.710	-8.713	22.250	1.00	34.35
ATOM	6908	O	GLY	K	44	113.522	-8.942	23.436	1.00	33.06
ATOM	6909	N	LEU	K	45	113.180	-7.676	21.631	1.00	27.74
ATOM	6910	CA	LEU	K	45	112.283	-6.754	22.276	1.00	21.83
ATOM	6911	C	LEU	K	45	110.868	-7.271	22.009	1.00	20.39
ATOM	6912	O	LEU	K	45	110.460	-7.377	20.844	1.00	19.04
ATOM	6913	CB	LEU	K	45	112.428	-5.397	21.612	1.00	25.56
ATOM	6914	CG	LEU	K	45	113.423	-4.344	22.099	1.00	23.51
ATOM	6915	CD1	LEU	K	45	114.368	-4.899	23.156	1.00	15.70
ATOM	6916	CD2	LEU	K	45	114.140	-3.810	20.885	1.00	16.90
ATOM	6917	N	GLU	K	46	110.111	-7.529	23.083	1.00	21.71
ATOM	6918	CA	GLU	K	46	108.720	-8.022	23.013	1.00	18.01
ATOM	6919	C	GLU	K	46	107.775	-7.011	23.687	1.00	19.42
ATOM	6920	O	GLU	K	46	108.077	-6.523	24.790	1.00	19.18
ATOM	6921	CB	GLU	K	46	108.589	-9.370	23.714	1.00	8.34
ATOM	6922	CG	GLU	K	46	109.172	-10.498	22.892	1.00	13.23
ATOM	6923	CD	GLU	K	46	108.427	-11.826	23.053	1.00	16.89
ATOM	6924	OE1	GLU	K	46	108.553	-12.433	24.149	1.00	19.81
ATOM	6925	OE2	GLU	K	46	107.733	-12.261	22.088	1.00	14.28
ATOM	6926	N	TRP	K	47	106.667	-6.667	23.017	1.00	16.96
ATOM	6927	CA	TRP	K	47	105.693	-5.740	23.606	1.00	15.82
ATOM	6928	C	TRP	K	47	104.758	-6.599	24.460	1.00	15.66
ATOM	6929	O	TRP	K	47	104.210	-7.608	23.983	1.00	17.21
ATOM	6930	CB	TRP	K	47	104.892	-5.045	22.518	1.00	16.08
ATOM	6931	CG	TRP	K	47	103.862	-4.066	23.050	1.00	21.47
ATOM	6932	CD1	TRP	K	47	104.070	-2.745	23.415	1.00	22.03
ATOM	6933	CD2	TRP	K	47	102.447	-4.286	23.162	1.00	21.00
ATOM	6934	NE1	TRP	K	47	102.873	-2.147	23.730	1.00	19.17
ATOM	6935	CE2	TRP	K	47	101.865	-3.068	23.585	1.00	20.74
ATOM	6936	CE3	TRP	K	47	101.611	-5.389	22.939	1.00	22.89
ATOM	6937	CZ2	TRP	K	47	100.497	-2.930	23.788	1.00	21.83
ATOM	6938	CZ3	TRP	K	47	100.251	-5.245	23.142	1.00	23.33
ATOM	6939	CH2	TRP	K	47	99.709	-4.025	23.560	1.00	22.56
ATOM	6940	N	ILE	K	48	104.611	-6.245	25.730	1.00	12.21
ATOM	6941	CA	ILE	K	48	103.731	-7.018	26.605	1.00	15.18
ATOM	6942	C	ILE	K	48	102.291	-6.505	26.516	1.00	14.65
ATOM	6943	O	ILE	K	48	101.372	-7.257	26.160	1.00	16.36
ATOM	6944	CB	ILE	K	48	104.158	-6.962	28.054	1.00	15.43
ATOM	6945	CG1	ILE	K	48	105.424	-7.784	28.271	1.00	13.32
ATOM	6946	CG2	ILE	K	48	103.068	-7.569	28.908	1.00	16.88
ATOM	6947	CD1	ILE	K	48	106.306	-7.202	29.377	1.00	8.35
ATOM	6948	N	GLY	K	49	102.106	-5.224	26.822	1.00	7.92
ATOM	6949	CA	GLY	K	49	100.790	-4.642	26.723	1.00	5.54
ATOM	6950	C	GLY	K	49	100.822	-3.149	26.913	1.00	3.51
ATOM	6951	O	GLY	K	49	101.883	-2.581	27.075	1.00	2.95
ATOM	6952	N	GLU	K	50	99.647	-2.536	26.994	1.00	3.73
ATOM	6953	CA	GLU	K	50	99.542	-1.110	27.133	1.00	2.05
ATOM	6954	C	GLU	K	50	98.521	-0.839	28.202	1.00	5.67
ATOM	6955	O	GLU	K	50	97.762	-1.724	28.551	1.00	10.18
ATOM	6956	CB	GLU	K	50	99.072	-0.515	25.828	1.00	2.00
ATOM	6957	CG	GLU	K	50	97.696	-0.904	25.464	1.00	2.00
ATOM	6958	CD	GLU	K	50	97.246	-0.268	24.146	1.00	5.96

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ATOM	6959	OE1	GLU	K	50	97.789	0.805	23.790	1.00	5.26
ATOM	6960	OE2	GLU	K	50	96.349	-0.840	23.470	1.00	4.59
ATOM	6961	N	ILE	K	51	98.549	0.355	28.774	1.00	6.07
ATOM	6962	CA	ILE	K	51	97.565	0.734	29.760	1.00	10.53
ATOM	6963	C	ILE	K	51	97.393	2.205	29.568	1.00	15.19
ATOM	6964	O	ILE	K	51	98.378	2.898	29.396	1.00	21.45
ATOM	6965	CB	ILE	K	51	98.079	0.518	31.198	1.00	14.59
ATOM	6966	CG1	ILE	K	51	96.961	0.779	32.213	1.00	13.39
ATOM	6967	CG2	ILE	K	51	99.241	1.486	31.522	1.00	9.59
ATOM	6968	CD1	ILE	K	51	96.983	-0.241	33.382	1.00	10.69
ATOM	6969	N	ASN	K	52	96.164	2.701	29.583	1.00	14.55
ATOM	6970	CA	ASN	K	52	95.972	4.140	29.480	1.00	12.08
ATOM	6971	C	ASN	K	52	95.978	4.454	30.971	1.00	10.59
ATOM	6972	O	ASN	K	52	95.274	3.827	31.741	1.00	16.64
ATOM	6973	CB	ASN	K	52	94.621	4.427	28.811	1.00	9.03
ATOM	6974	CG	ASN	K	52	94.024	5.781	29.191	1.00	9.82
ATOM	6975	OD1	ASN	K	52	94.386	6.407	30.197	1.00	5.29
ATOM	6976	ND2	ASN	K	52	93.073	6.225	28.378	1.00	3.56
ATOM	6977	N	PRO	K	53	96.821	5.362	31.421	1.00	7.53
ATOM	6978	CA	PRO	K	53	96.701	5.539	32.863	1.00	12.29
ATOM	6979	C	PRO	K	53	95.473	6.391	33.292	1.00	11.71
ATOM	6980	O	PRO	K	53	94.966	6.260	34.396	1.00	15.20
ATOM	6981	CB	PRO	K	53	98.058	6.130	33.256	1.00	9.48
ATOM	6982	CG	PRO	K	53	98.495	6.855	32.044	1.00	13.70
ATOM	6983	CD	PRO	K	53	97.854	6.219	30.839	1.00	11.14
ATOM	6984	N	SER	K	54	94.978	7.251	32.428	1.00	10.34
ATOM	6985	CA	SER	K	54	93.826	8.055	32.793	1.00	13.52
ATOM	6986	C	SER	K	54	92.646	7.150	33.122	1.00	15.97
ATOM	6987	O	SER	K	54	91.862	7.413	34.023	1.00	17.61
ATOM	6988	CB	SER	K	54	93.440	8.925	31.609	1.00	14.56
ATOM	6989	OG	SER	K	54	92.084	8.735	31.279	1.00	13.26
ATOM	6990	N	ASN	K	55	92.553	6.091	32.331	1.00	18.32
ATOM	6991	CA	ASN	K	55	91.508	5.066	32.347	1.00	17.54
ATOM	6992	C	ASN	K	55	91.585	3.916	33.291	1.00	16.90
ATOM	6993	O	ASN	K	55	90.689	3.677	34.061	1.00	22.56
ATOM	6994	CB	ASN	K	55	91.453	4.402	30.989	1.00	25.28
ATOM	6995	CG	ASN	K	55	90.098	4.388	30.444	1.00	34.17
ATOM	6996	OD1	ASN	K	55	89.160	4.497	31.208	1.00	37.31
ATOM	6997	ND2	ASN	K	55	89.955	4.257	29.113	1.00	38.77
ATOM	6998	N	GLY	K	56	92.655	3.151	33.161	1.00	13.82
ATOM	6999	CA	GLY	K	56	92.826	1.946	33.946	1.00	7.70
ATOM	7000	C	GLY	K	56	92.795	0.892	32.855	1.00	5.81
ATOM	7001	O	GLY	K	56	93.256	-0.254	32.998	1.00	3.12
ATOM	7002	N	ASP	K	57	92.222	1.341	31.738	1.00	7.38
ATOM	7003	CA	ASP	K	57	92.056	0.542	30.528	1.00	4.05
ATOM	7004	C	ASP	K	57	93.344	-0.131	30.066	1.00	7.02
ATOM	7005	O	ASP	K	57	94.436	0.448	30.104	1.00	13.97
ATOM	7006	CB	ASP	K	57	91.493	1.429	29.417	1.00	2.00
ATOM	7007	CG	ASP	K	57	90.899	0.620	28.285	1.00	5.13
ATOM	7008	OD1	ASP	K	57	90.515	1.209	27.254	1.00	16.37
ATOM	7009	OD2	ASP	K	57	90.810	-0.602	28.401	1.00	6.79
ATOM	7010	N	THR	K	58	93.239	-1.368	29.630	1.00	4.30
ATOM	7011	CA	THR	K	58	94.434	-2.078	29.175	1.00	4.23
ATOM	7012	C	THR	K	58	94.286	-2.821	27.879	1.00	2.78
ATOM	7013	O	THR	K	58	93.184	-3.063	27.435	1.00	7.47
ATOM	7014	CB	THR	K	58	94.850	-3.149	30.112	1.00	2.07
ATOM	7015	OG1	THR	K	58	94.074	-4.315	29.814	1.00	2.00
ATOM	7016	CG2	THR	K	58	94.718	-2.673	31.565	1.00	7.52
ATOM	7017	N	ASN	K	59	95.415	-3.232	27.315	1.00	2.45
ATOM	7018	CA	ASN	K	59	95.449	-3.982	26.075	1.00	5.61

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ATOM	7019	C	ASN	K	59	96.720	-4.829	26.107	1.00	7.47
ATOM	7020	O	ASN	K	59	97.803	-4.295	26.289	1.00	16.58
ATOM	7021	CB	ASN	K	59	95.417	-3.013	24.907	1.00	2.00
ATOM	7022	CG	ASN	K	59	94.020	-2.706	24.498	1.00	7.61
ATOM	7023	OD1	ASN	K	59	93.311	-3.599	24.031	1.00	16.59
ATOM	7024	ND2	ASN	K	59	93.576	-1.466	24.711	1.00	12.46
ATOM	7025	N	PHE	K	60	96.600	-6.149	25.994	1.00	6.30
ATOM	7026	CA	PHE	K	60	97.782	-7.012	26.053	1.00	6.22
ATOM	7027	C	PHE	K	60	98.070	-7.699	24.753	1.00	9.96
ATOM	7028	O	PHE	K	60	97.204	-7.769	23.873	1.00	13.25
ATOM	7029	CB	PHE	K	60	97.605	-8.099	27.111	1.00	2.00
ATOM	7030	CG	PHE	K	60	97.599	-7.573	28.484	1.00	2.00
ATOM	7031	CD1	PHE	K	60	96.575	-6.781	28.917	1.00	4.79
ATOM	7032	CD2	PHE	K	60	98.624	-7.837	29.342	1.00	2.00
ATOM	7033	CE1	PHE	K	60	96.577	-6.256	30.194	1.00	9.64
ATOM	7034	CE2	PHE	K	60	98.629	-7.313	30.626	1.00	6.81
ATOM	7035	CZ	PHE	K	60	97.608	-6.524	31.050	1.00	7.19
ATOM	7036	N	ASN	K	61	99.306	-8.188	24.646	1.00	11.29
ATOM	7037	CA	ASN	K	61	99.740	-8.959	23.498	1.00	9.88
ATOM	7038	C	ASN	K	61	99.307	-10.338	23.980	1.00	8.61
ATOM	7039	O	ASN	K	61	99.771	-10.834	25.021	1.00	2.00
ATOM	7040	CB	ASN	K	61	101.276	-8.8 <sup>6</sup>	23.322	1.00	16.85
ATOM	7041	CG	ASN	K	61	101.869	-10.045	22.422	1.00	19.54
ATOM	7042	OD1	ASN	K	61	101.153	-10.891	21.857	1.00	22.42
ATOM	7043	ND2	ASN	K	61	103.183	-10.039	22.285	1.00	12.22
ATOM	7044	N	GLU	K	62	98.407	-10.932	23.203	1.00	9.41
ATOM	7045	CA	GLU	K	62	97.846	-12.238	23.526	1.00	10.37
ATOM	7046	C	GLU	K	62	98.898	-13.080	24.132	1.00	9.32
ATOM	7047	O	GLU	K	62	98.671	-13.695	25.139	1.00	10.86
ATOM	7048	CB	GLU	K	62	97.356	-12.968	22.284	1.00	14.62
ATOM	7049	CG	GLU	K	62	95.974	-13.517	22.382	1.00	22.92
ATOM	7050	CD	GLU	K	62	94.940	-12.418	22.619	1.00	34.16
ATOM	7051	OE1	GLU	K	62	94.394	-12.312	23.759	1.00	41.11
ATOM	7052	OE2	GLU	K	62	94.676	-11.654	21.656	1.00	31.66
ATOM	7053	N	LYS	K	63	100.051	-13.115	23.482	1.00	14.17
ATOM	7054	CA	LYS	K	63	101.165	-13.927	23.927	1.00	18.45
ATOM	7055	C	LYS	K	63	101.532	-13.720	25.379	1.00	17.79
ATOM	7056	O	LYS	K	63	102.315	-14.477	25.926	1.00	18.57
ATOM	7057	CB	LYS	K	63	102.371	-13.725	22.984	1.00	24.30
ATOM	7058	CG	LYS	K	63	103.757	-13.885	23.608	1.00	32.95
ATOM	7059	CD	LYS	K	63	104.297	-15.306	23.526	1.00	41.27
ATOM	7060	CE	LYS	K	63	105.614	-15.464	24.352	1.00	47.44
ATOM	7061	NZ	LYS	K	63	106.522	-16.621	23.946	1.00	46.84
ATOM	7062	N	PHE	K	64	100.928	-12.736	26.023	1.00	18.67
ATOM	7063	CA	PHE	K	64	101.227	-12.481	27.438	1.00	24.19
ATOM	7064	C	PHE	K	64	99.977	-12.281	28.312	1.00	28.98
ATOM	7065	O	PHE	K	64	100.083	-11.964	29.518	1.00	30.12
ATOM	7066	CB	PHE	K	64	102.080	-11.208	27.577	1.00	23.07
ATOM	7067	CG	PHE	K	64	103.503	-11.372	27.142	1.00	22.76
ATOM	7068	CD1	PHE	K	64	103.823	-11.385	25.776	1.00	23.37
ATOM	7069	CD2	PHE	K	64	104.516	-11.510	28.079	1.00	14.77
ATOM	7070	CE1	PHE	K	64	105.114	-11.536	25.348	1.00	14.67
ATOM	7071	CE2	PHE	K	64	105.809	-11.662	27.663	1.00	16.26
ATOM	7072	CZ	PHE	K	64	106.115	-11.676	26.289	1.00	16.55
ATOM	7073	N	LYS	K	65	98.800	-12.412	27.699	1.00	31.67
ATOM	7074	CA	LYS	K	65	97.540	-12.171	28.399	1.00	27.05
ATOM	7075	C	LYS	K	65	97.502	-12.804	29.773	1.00	22.60
ATOM	7076	O	LYS	K	65	96.872	-12.316	30.697	1.00	13.74
ATOM	7077	CB	LYS	K	65	96.365	-12.647	27.547	1.00	25.42
ATOM	7078	CG	LYS	K	65	95.260	-11.646	27.501	1.00	36.26

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ATOM	7079	CD	LYS	K	65	94.841	-11.247	28.936	1.00	47.11
ATOM	7080	CE	LYS	K	65	95.403	-9.862	29.372	1.00	53.05
ATOM	7081	NZ	LYS	K	65	96.087	-9.813	30.714	1.00	49.62
ATOM	7082	N	SER	K	66	98.219	-13.897	29.909	1.00	23.91
ATOM	7083	CA	SER	K	66	98.243	-14.588	31.171	1.00	27.26
ATOM	7084	C	SER	K	66	99.278	-14.070	32.151	1.00	28.10
ATOM	7085	O	SER	K	66	98.992	-13.886	33.333	1.00	36.28
ATOM	7086	CB	SER	K	66	98.500	-16.058	30.917	1.00	26.92
ATOM	7087	OG	SER	K	66	99.693	-16.178	30.173	1.00	43.41
ATOM	7088	N	LYS	K	67	100.490	-13.846	31.674	1.00	27.72
ATOM	7089	CA	LYS	K	67	101.566	-13.409	32.559	1.00	25.39
ATOM	7090	C	LYS	K	67	101.481	-12.024	33.193	1.00	22.43
ATOM	7091	O	LYS	K	67	101.920	-11.825	34.331	1.00	21.73
ATOM	7092	CB	LYS	K	67	102.919	-13.544	31.834	1.00	25.03
ATOM	7093	CG	LYS	K	67	103.912	-14.467	32.539	1.00	24.76
ATOM	7094	CD	LYS	K	67	103.596	-15.911	32.237	1.00	33.66
ATOM	7095	CE	LYS	K	67	104.769	-16.655	31.588	1.00	40.47
ATOM	7096	NZ	LYS	K	67	104.456	-17.158	30.198	1.00	49.06
ATOM	7097	N	ALA	K	68	100.894	-11.070	32.489	1.00	18.81
ATOM	7098	CA	ALA	K	68	100.896	-9.723	33.016	1.00	18.23
ATOM	7099	C	ALA	K	68	99.610	-9.133	33.547	1.00	15.97
ATOM	7100	O	ALA	K	68	98.530	-9.558	33.218	1.00	20.36
ATOM	7101	CB	ALA	K	68	101.535	-8.757	31.946	1.00	19.37
ATOM	7102	N	THR	K	69	99.761	-8.106	34.361	1.00	13.54
ATOM	7103	CA	THR	K	69	98.638	-7.418	34.941	1.00	10.79
ATOM	7104	C	THR	K	69	98.963	-5.935	35.102	1.00	11.15
ATOM	7105	O	THR	K	69	99.527	-5.479	36.110	1.00	9.20
ATOM	7106	CB	THR	K	69	98.319	-7.998	36.272	1.00	11.95
ATOM	7107	OG1	THR	K	69	98.622	-9.398	36.267	1.00	17.46
ATOM	7108	CG2	THR	K	69	96.876	-7.782	36.558	1.00	11.77
ATOM	7109	N	LEU	K	70	98.617	-5.187	34.073	1.00	8.86
ATOM	7110	CA	LEU	K	70	98.875	-3.766	34.052	1.00	10.29
ATOM	7111	C	LEU	K	70	97.925	-3.020	34.930	1.00	7.33
ATOM	7112	O	LEU	K	70	96.776	-3.347	34.936	1.00	14.54
ATOM	7113	CB	LEU	K	70	98.778	-3.282	32.610	1.00	13.48
ATOM	7114	CG	LEU	K	70	99.722	-4.037	31.662	1.00	5.91
ATOM	7115	CD1	LEU	K	70	99.906	-3.203	30.378	1.00	6.79
ATOM	7116	CD2	LEU	K	70	101.076	-4.317	32.378	1.00	2.00
ATOM	7117	N	THR	K	71	98.395	-2.013	35.660	1.00	11.44
ATOM	7118	CA	THR	K	71	97.547	-1.235	36.582	1.00	11.00
ATOM	7119	C	THR	K	71	98.272	0.095	36.837	1.00	11.43
ATOM	7120	O	THR	K	71	99.473	0.186	36.582	1.00	20.12
ATOM	7121	CB	THR	K	71	97.363	-2.014	37.920	1.00	2.00
ATOM	7122	OG1	THR	K	71	97.847	-1.232	39.000	1.00	9.83
ATOM	7123	CG2	THR	K	71	98.186	-3.289	37.913	1.00	10.33
ATOM	7124	N	VAL	K	72	97.585	1.126	37.322	1.00	7.79
ATOM	7125	CA	VAL	K	72	98.279	2.395	37.554	1.00	9.97
ATOM	7126	C	VAL	K	72	97.739	3.187	38.726	1.00	15.29
ATOM	7127	O	VAL	K	72	96.603	3.002	39.116	1.00	22.03
ATOM	7128	CB	VAL	K	72	98.256	3.320	36.270	1.00	10.36
ATOM	7129	CG1	VAL	K	72	97.896	2.499	35.021	1.00	17.73
ATOM	7130	CG2	VAL	K	72	97.294	4.464	36.427	1.00	2.00
ATOM	7131	N	ASP	K	73	98.558	4.055	39.308	1.00	18.61
ATOM	7132	CA	ASP	K	73	98.107	4.889	40.409	1.00	15.76
ATOM	7133	C	ASP	K	73	98.086	6.326	39.973	1.00	15.42
ATOM	7134	O	ASP	K	73	98.943	7.124	40.354	1.00	15.80
ATOM	7135	CB	ASP	K	73	99.033	4.796	41.594	1.00	24.64
ATOM	7136	CG	ASP	K	73	98.745	5.874	42.614	1.00	36.64
ATOM	7137	OD1	ASP	K	73	97.741	6.627	42.442	1.00	42.11
ATOM	7138	OD2	ASP	K	73	99.517	5.969	43.587	1.00	43.84

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ATOM	7139	N	LYS	K	74	97.119	6.638	39.140	1.00	14.31
ATOM	7140	CA	LYS	K	74	96.940	7.976	38.632	1.00	17.40
ATOM	7141	C	LYS	K	74	97.545	9.039	39.541	1.00	18.72
ATOM	7142	O	LYS	K	74	98.262	9.923	39.096	1.00	23.99
ATOM	7143	CB	LYS	K	74	95.450	8.237	38.481	1.00	19.15
ATOM	7144	CG	LYS	K	74	95.017	8.824	37.180	1.00	24.11
ATOM	7145	CD	LYS	K	74	93.749	9.608	37.400	1.00	26.51
ATOM	7146	CE	LYS	K	74	92.589	8.952	36.676	1.00	29.94
ATOM	7147	NZ	LYS	K	74	91.849	9.913	35.781	1.00	31.49
ATOM	7148	N	SER	K	75	97.226	8.974	40.820	1.00	21.46
ATOM	7149	CA	SER	K	75	97.739	9.953	41.765	1.00	25.89
ATOM	7150	C	SER	K	75	99.256	9.969	41.817	1.00	29.16
ATOM	7151	O	SER	K	75	99.883	11.016	41.613	1.00	31.94
ATOM	7152	CB	SER	K	75	97.209	9.665	43.164	1.00	27.81
ATOM	7153	OG	SER	K	75	98.283	9.431	44.073	1.00	32.23
ATOM	7154	N	ALA	K	76	99.841	8.806	42.112	1.00	27.95
ATOM	7155	CA	ALA	K	76	101.284	8.677	42.200	1.00	26.69
ATOM	7156	C	ALA	K	76	101.961	8.620	40.839	1.00	27.26
ATOM	7157	O	ALA	K	76	103.154	8.312	40.739	1.00	25.51
ATOM	7158	CB	ALA	K	76	101.641	7.469	42.996	1.00	29.66
ATOM	7159	N	SER	K	77	101.199	8.932	39.795	1.00	27.89
ATOM	7160	CA	SER	K	77	101.739	8.956	38.444	1.00	27.65
ATOM	7161	C	SER	K	77	102.629	7.718	38.325	1.00	22.93
ATOM	7162	O	SER	K	77	103.798	7.809	37.961	1.00	26.85
ATOM	7163	CB	SER	K	77	102.534	10.274	38.263	1.00	31.10
ATOM	7164	OG	SER	K	77	103.184	10.380	36.999	1.00	41.80
ATOM	7165	N	THR	K	78	102.066	6.555	38.612	1.00	13.25
ATOM	7166	CA	THR	K	78	102.857	5.339	38.577	1.00	13.44
ATOM	7167	C	THR	K	78	102.152	4.174	37.921	1.00	15.74
ATOM	7168	O	THR	K	78	100.960	4.050	38.052	1.00	21.49
ATOM	7169	CB	THR	K	78	103.240	4.928	39.983	1.00	8.87
ATOM	7170	OG1	THR	K	78	104.095	5.943	40.524	1.00	2.97
ATOM	7171	CG2	THR	K	78	103.938	3.552	39.977	1.00	4.92
ATOM	7172	N	ALA	K	79	102.859	3.336	37.179	1.00	11.58
ATOM	7173	CA	ALA	K	79	102.204	2.190	36.589	1.00	7.63
ATOM	7174	C	ALA	K	79	102.858	0.995	37.254	1.00	12.25
ATOM	7175	O	ALA	K	79	103.926	1.116	37.880	1.00	14.11
ATOM	7176	CB	ALA	K	79	102.413	2.172	35.121	1.00	7.94
ATOM	7177	N	TYR	K	80	102.209	-0.160	37.142	1.00	10.90
ATOM	7178	CA	TYR	K	80	102.706	-1.369	37.768	1.00	8.61
ATOM	7179	C	TYR	K	80	102.460	-2.538	36.866	1.00	10.74
ATOM	7180	O	TYR	K	80	101.462	-2.560	36.176	1.00	12.40
ATOM	7181	CB	TYR	K	80	101.960	-1.622	39.087	1.00	9.16
ATOM	7182	CG	TYR	K	80	102.090	-0.513	40.108	1.00	7.41
ATOM	7183	CD1	TYR	K	80	102.910	-0.648	41.223	1.00	4.47
ATOM	7184	CD2	TYR	K	80	101.456	0.704	39.904	1.00	8.55
ATOM	7185	CE1	TYR	K	80	103.094	0.407	42.092	1.00	10.26
ATOM	7186	CE2	TYR	K	80	101.632	1.761	40.767	1.00	13.33
ATOM	7187	CZ	TYR	K	80	102.448	1.607	41.858	1.00	14.02
ATOM	7188	OH	TYR	K	80	102.589	2.634	42.743	1.00	20.83
ATOM	7189	N	MET	K	81	103.380	-3.494	36.838	1.00	15.35
ATOM	7190	CA	MET	K	81	103.180	-4.700	36.043	1.00	21.06
ATOM	7191	C	MET	K	81	103.381	-5.846	37.025	1.00	25.14
ATOM	7192	O	MET	K	81	104.292	-5.805	37.879	1.00	18.26
ATOM	7193	CB	MET	K	81	104.172	-4.818	34.879	1.00	22.62
ATOM	7194	CG	MET	K	81	104.148	-6.194	34.251	1.00	21.77
ATOM	7195	SD	MET	K	81	104.987	-6.243	32.715	1.00	32.25
ATOM	7196	CE	MET	K	81	106.649	-6.077	33.228	1.00	25.99
ATOM	7197	N	GLU	K	82	102.491	-6.839	36.928	1.00	27.92
ATOM	7198	CA	GLU	K	82	102.548	-7.987	37.806	1.00	31.34

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ATOM	7199	C	GLU	K	82	102.636	-9.251	36.998	1.00	32.07
ATOM	7200	O	GLU	K	82	101.686	-9.652	36.334	1.00	33.59
ATOM	7201	CB	GLU	K	82	101.313	-8.035	38.696	1.00	37.04
ATOM	7202	CG	GLU	K	82	101.503	-8.873	39.943	1.00	47.22
ATOM	7203	CD	GLU	K	82	100.281	-8.868	40.847	1.00	54.78
ATOM	7204	OE1	GLU	K	82	99.869	-7.752	41.253	1.00	59.37
ATOM	7205	OE2	GLU	K	82	99.743	-9.970	41.148	1.00	58.49
ATOM	7206	N	LEU	K	83	103.809	-9.858	37.019	1.00	33.11
ATOM	7207	CA	LEU	K	83	104.002	-11.096	36.302	1.00	32.79
ATOM	7208	C	LEU	K	83	103.740	-12.164	37.341	1.00	31.69
ATOM	7209	O	LEU	K	83	104.176	-12.068	38.489	1.00	28.90
ATOM	7210	CB	LEU	K	83	105.431	-11.167	35.734	1.00	33.42
ATOM	7211	CG	LEU	K	83	105.794	-9.889	34.960	1.00	33.26
ATOM	7212	CD1	LEU	K	83	107.293	-9.703	34.935	1.00	35.24
ATOM	7213	CD2	LEU	K	83	105.210	-9.948	33.559	1.00	30.40
ATOM	7214	N	SER	K	84	103.002	-13.180	36.946	1.00	32.75
ATOM	7215	CA	SER	K	84	102.687	-14.218	37.892	1.00	36.07
ATOM	7216	C	SER	K	84	103.014	-15.566	37.345	1.00	35.79
ATOM	7217	O	SER	K	84	103.184	-15.729	36.135	1.00	35.35
ATOM	7218	CB	SER	K	84	101.211	-14.168	38.234	1.00	42.69
ATOM	7219	OG	SER	K	84	100.483	-13.589	37.161	1.00	55.72
ATOM	7220	N	SER	K	85	103.087	-16.536	38.246	1.00	36.47
ATOM	7221	CA	SER	K	85	103.397	-17.900	37.863	1.00	37.84
ATOM	7222	C	SER	K	85	104.592	-17.844	36.911	1.00	35.27
ATOM	7223	O	SER	K	85	104.532	-18.180	35.719	1.00	33.11
ATOM	7224	CB	SER	K	85	102.173	-18.557	37.200	1.00	43.33
ATOM	7225	OG	SER	K	85	101.495	-17.654	36.330	1.00	49.12
ATOM	7226	N	LEU	K	86	105.696	-17.393	37.467	1.00	32.43
ATOM	7227	CA	LEU	K	86	106.896	-17.270	36.700	1.00	31.15
ATOM	7228	C	LEU	K	86	107.585	-18.596	36.408	1.00	31.82
ATOM	7229	O	LEU	K	86	107.920	-19.360	37.316	1.00	24.90
ATOM	7230	CB	LEU	K	86	107.835	-16.315	37.427	1.00	29.45
ATOM	7231	CG	LEU	K	86	107.258	-14.894	37.427	1.00	27.89
ATOM	7232	CD1	LEU	K	86	107.759	-14.135	38.635	1.00	26.95
ATOM	7233	CD2	LEU	K	86	107.637	-14.167	36.121	1.00	25.82
ATOM	7234	N	ARG	K	87	107.765	-18.859	35.115	1.00	35.99
ATOM	7235	CA	ARG	K	87	108.488	-20.036	34.662	1.00	39.80
ATOM	7236	C	ARG	K	87	109.911	-19.474	34.589	1.00	40.31
ATOM	7237	O	ARG	K	87	110.131	-18.282	34.869	1.00	36.65
ATOM	7238	CB	ARG	K	87	108.079	-20.475	33.247	1.00	42.86
ATOM	7239	CG	ARG	K	87	106.609	-20.642	33.002	1.00	51.57
ATOM	7240	CD	ARG	K	87	106.182	-19.951	31.710	1.00	56.81
ATOM	7241	NE	ARG	K	87	106.542	-20.704	30.508	1.00	63.01
ATOM	7242	CZ	ARG	K	87	106.037	-21.891	30.166	1.00	66.48
ATOM	7243	NH1	ARG	K	87	105.140	-22.501	30.933	1.00	68.70
ATOM	7244	NH2	ARG	K	87	106.415	-22.461	29.030	1.00	68.68
ATOM	7245	N	SER	K	88	110.865	-20.311	34.177	1.00	42.24
ATOM	7246	CA	SER	K	88	112.249	-19.859	34.062	1.00	42.14
ATOM	7247	C	SER	K	88	112.444	-18.965	32.831	1.00	40.59
ATOM	7248	O	SER	K	88	113.228	-18.007	32.879	1.00	41.69
ATOM	7249	CB	SER	K	88	113.201	-21.037	33.975	1.00	39.61
ATOM	7250	OG	SER	K	88	113.779	-21.062	32.695	1.00	41.97
ATOM	7251	N	GLU	K	89	111.732	-19.251	31.742	1.00	32.97
ATOM	7252	CA	GLU	K	89	111.878	-18.434	30.562	1.00	35.12
ATOM	7253	C	GLU	K	89	111.290	-17.038	30.730	1.00	36.04
ATOM	7254	O	GLU	K	89	111.235	-16.246	29.788	1.00	41.24
ATOM	7255	CB	GLU	K	89	111.248	-19.126	29.379	1.00	37.78
ATOM	7256	CG	GLU	K	89	111.434	-20.603	29.446	1.00	45.02
ATOM	7257	CD	GLU	K	89	110.449	-21.233	30.378	1.00	45.52
ATOM	7258	OE1	GLU	K	89	110.800	-22.206	31.078	1.00	46.38

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ATOM	7259	OE2	GLU	K	89	109.307	-20.743	30.411	1.00	50.55
ATOM	7260	N	ASP	K	90	110.856	-16.724	31.936	1.00	35.15
ATOM	7261	CA	ASP	K	90	110.295	-15.412	32.194	1.00	34.80
ATOM	7262	C	ASP	K	90	111.385	-14.399	32.537	1.00	34.49
ATOM	7263	O	ASP	K	90	111.140	-13.181	32.613	1.00	32.27
ATOM	7264	CB	ASP	K	90	109.295	-15.517	33.334	1.00	36.85
ATOM	7265	CG	ASP	K	90	107.919	-15.946	32.864	1.00	37.22
ATOM	7266	OD1	ASP	K	90	107.673	-16.061	31.628	1.00	34.58
ATOM	7267	OD2	ASP	K	90	107.087	-16.164	33.766	1.00	39.71
ATOM	7268	N	THR	K	91	112.597	-14.915	32.742	1.00	35.00
ATOM	7269	CA	THR	K	91	113.739	-14.065	33.078	1.00	32.04
ATOM	7270	C	THR	K	91	114.075	-13.108	31.933	1.00	27.10
ATOM	7271	O	THR	K	91	114.099	-13.504	30.771	1.00	26.37
ATOM	7272	CB	THR	K	91	114.996	-14.884	33.407	1.00	31.72
ATOM	7273	OG1	THR	K	91	114.675	-15.956	34.295	1.00	28.97
ATOM	7274	CG2	THR	K	91	115.999	-14.000	34.092	1.00	36.99
ATOM	7275	N	ALA	K	92	114.317	-11.845	32.268	1.00	20.60
ATOM	7276	CA	ALA	K	92	114.624	-10.834	31.262	1.00	20.21
ATOM	7277	C	ALA	K	92	114.598	-9.427	31.871	1.00	20.73
ATOM	7278	O	ALA	K	92	114.651	-9.251	33.099	1.00	20.62
ATOM	7279	CB	ALA	K	92	113.614	-10.921	30.102	1.00	15.41
ATOM	7280	N	VAL	K	93	114.608	-8.415	31.014	1.00	18.39
ATOM	7281	CA	VAL	K	93	114.520	-7.075	31.550	1.00	18.82
ATOM	7282	C	VAL	K	93	113.236	-6.527	31.016	1.00	21.61
ATOM	7283	O	VAL	K	93	112.924	-6.651	29.808	1.00	19.83
ATOM	7284	CB	VAL	K	93	115.693	-6.175	31.147	1.00	17.11
ATOM	7285	CG1	VAL	K	93	115.506	-4.761	31.695	1.00	7.99
ATOM	7286	CG2	VAL	K	93	116.951	-6.755	31.681	1.00	11.43
ATOM	7287	N	TYR	K	94	112.496	-5.960	31.965	1.00	18.63
ATOM	7288	CA	TYR	K	94	111.207	-5.398	31.719	1.00	16.82
ATOM	7289	C	TYR	K	94	111.329	-3.900	31.711	1.00	13.76
ATOM	7290	O	TYR	K	94	111.794	-3.299	32.658	1.00	14.68
ATOM	7291	CB	TYR	K	94	110.233	-5.926	32.776	1.00	15.13
ATOM	7292	CG	TYR	K	94	109.989	-7.413	32.600	1.00	12.05
ATOM	7293	CD1	TYR	K	94	110.800	-8.360	33.239	1.00	13.15
ATOM	7294	CD2	TYR	K	94	108.997	-7.871	31.726	1.00	10.28
ATOM	7295	CE1	TYR	K	94	110.626	-9.730	33.000	1.00	12.10
ATOM	7296	CE2	TYR	K	94	108.812	-9.219	31.475	1.00	7.51
ATOM	7297	CZ	TYR	K	94	109.625	-10.144	32.107	1.00	12.20
ATOM	7298	OH	TYR	K	94	109.452	-11.475	31.797	1.00	13.56
ATOM	7299	N	TYR	K	95	110.943	-3.316	30.594	1.00	13.03
ATOM	7300	CA	TYR	K	95	111.013	-1.888	30.400	1.00	14.67
ATOM	7301	C	TYR	K	95	109.607	-1.287	30.447	1.00	15.45
ATOM	7302	O	TYR	K	95	108.623	-1.895	30.002	1.00	16.10
ATOM	7303	CB	TYR	K	95	111.639	-1.586	29.017	1.00	15.97
ATOM	7304	CG	TYR	K	95	113.138	-1.747	28.920	1.00	15.65
ATOM	7305	CD1	TYR	K	95	113.976	-1.048	29.764	1.00	17.41
ATOM	7306	CD2	TYR	K	95	113.711	-2.632	28.005	1.00	17.07
ATOM	7307	CE1	TYR	K	95	115.337	-1.226	29.710	1.00	24.68
ATOM	7308	CE2	TYR	K	95	115.076	-2.821	27.938	1.00	18.23
ATOM	7309	CZ	TYR	K	95	115.887	-2.115	28.795	1.00	24.39
ATOM	7310	OH	TYR	K	95	117.252	-2.282	28.767	1.00	29.30
ATOM	7311	N	CYS	K	96	109.492	-0.097	31.009	1.00	12.82
ATOM	7312	CA	CYS	K	96	108.204	0.554	30.978	1.00	14.29
ATOM	7313	C	CYS	K	96	108.521	1.708	30.035	1.00	11.01
ATOM	7314	O	CYS	K	96	109.575	2.321	30.133	1.00	12.33
ATOM	7315	CB	CYS	K	96	107.788	1.053	32.369	1.00	15.41
ATOM	7316	SG	CYS	K	96	108.502	2.657	32.833	1.00	29.48
ATOM	7317	N	THR	K	97	107.651	2.005	29.096	1.00	6.89
ATOM	7318	CA	THR	K	97	107.961	3.112	28.211	1.00	6.98



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ATOM	7319	C	THR	K	97	106.695	3.865	27.793	1.00	7.90
ATOM	7320	O	THR	K	97	105.624	3.298	27.650	1.00	9.84
ATOM	7321	CB	THR	K	97	108.759	2.640	26.960	1.00	2.00
ATOM	7322	OG1	THR	K	97	108.593	3.586	25.893	1.00	2.25
ATOM	7323	CG2	THR	K	97	108.263	1.288	26.490	1.00	2.00
ATOM	7324	N	ARG	K	98	106.847	5.156	27.596	1.00	4.34
ATOM	7325	CA	ARG	K	98	105.769	6.034	27.224	1.00	5.17
ATOM	7326	C	ARG	K	98	105.550	5.964	25.724	1.00	5.49
ATOM	7327	O	ARG	K	98	106.469	6.218	24.968	1.00	11.98
ATOM	7328	CB	ARG	K	98	106.210	7.430	27.617	1.00	7.88
ATOM	7329	CG	ARG	K	98	105.133	8.419	27.834	1.00	9.37
ATOM	7330	CD	ARG	K	98	105.214	9.464	26.816	1.00	7.99
ATOM	7331	NE	ARG	K	98	105.681	10.723	27.362	1.00	4.40
ATOM	7332	CZ	ARG	K	98	106.233	11.669	26.607	1.00	11.44
ATOM	7333	NH1	ARG	K	98	106.376	11.482	25.300	1.00	6.35
ATOM	7334	NH2	ARG	K	98	106.623	12.818	27.139	1.00	22.81
ATOM	7335	N	SER	K	99	104.348	5.631	25.283	1.00	3.32
ATOM	7336	CA	SER	K	99	104.073	5.591	23.855	1.00	7.71
ATOM	7337	C	SER	K	99	103.669	7.011	23.512	1.00	8.13
ATOM	7338	O	SER	K	99	103.197	7.749	24.369	1.00	12.01
ATOM	7339	CB	SER	K	99	102.927	4.625	23.528	1.00	7.71
ATOM	7340	OG	SER	K	99	101.692	5.325	23.386	1.00	21.31
ATOM	7341	N	ASP	K	100	103.902	7.415	22.283	1.00	8.82
ATOM	7342	CA	ASP	K	100	103.542	8.749	21.869	1.00	14.01
ATOM	7343	C	ASP	K	100	102.457	8.538	20.846	1.00	17.40
ATOM	7344	O	ASP	K	100	102.748	8.340	19.669	1.00	22.04
ATOM	7345	CB	ASP	K	100	104.785	9.426	21.269	1.00	18.76
ATOM	7346	CG	ASP	K	100	104.491	10.729	20.569	1.00	20.34
ATOM	7347	OD1	ASP	K	100	105.130	10.995	19.524	1.00	22.57
ATOM	7348	OD2	ASP	K	100	103.642	11.489	21.073	1.00	24.15
ATOM	7349	N	GLY	K	101	101.207	8.567	21.318	1.00	22.65
ATOM	7350	CA	GLY	K	101	100.054	8.395	20.450	1.00	16.86
ATOM	7351	C	GLY	K	101	99.970	6.934	20.151	1.00	13.56
ATOM	7352	O	GLY	K	101	99.420	6.522	19.144	1.00	11.90
ATOM	7353	N	ARG	K	102	100.536	6.141	21.044	1.00	12.17
ATOM	7354	CA	ARG	K	102	100.512	4.710	20.859	1.00	11.15
ATOM	7355	C	ARG	K	102	101.102	4.263	19.537	1.00	13.05
ATOM	7356	O	ARG	K	102	100.559	3.382	18.875	1.00	10.84
ATOM	7357	CB	ARG	K	102	99.079	4.225	20.972	1.00	10.57
ATOM	7358	CG	ARG	K	102	98.568	4.222	22.385	1.00	2.00
ATOM	7359	CD	ARG	K	102	97.168	3.937	22.339	1.00	5.20
ATOM	7360	NE	ARG	K	102	96.893	2.530	22.331	1.00	2.00
ATOM	7361	CZ	ARG	K	102	96.403	1.932	21.280	1.00	2.00
ATOM	7362	NH1	ARG	K	102	96.160	2.662	20.203	1.00	2.00
ATOM	7363	NH2	ARG	K	102	96.097	0.642	21.340	1.00	2.00
ATOM	7364	N	ASN	K	103	102.214	4.892	19.162	1.00	18.78
ATOM	7365	CA	ASN	K	103	102.941	4.560	17.936	1.00	13.36
ATOM	7366	C	ASN	K	103	104.434	4.507	18.262	1.00	12.92
ATOM	7367	O	ASN	K	103	104.921	3.436	18.600	1.00	19.24
ATOM	7368	CB	ASN	K	103	102.684	5.590	16.869	1.00	12.23
ATOM	7369	CG	ASN	K	103	101.372	5.426	16.250	1.00	8.71
ATOM	7370	OD1	ASN	K	103	100.473	6.173	16.553	1.00	18.70
ATOM	7371	ND2	ASN	K	103	101.238	4.452	15.364	1.00	5.41
ATOM	7372	N	ASP	K	104	105.165	5.621	18.170	1.00	5.67
ATOM	7373	CA	ASP	K	104	106.570	5.575	18.513	1.00	5.19
ATOM	7374	C	ASP	K	104	106.615	5.445	20.011	1.00	11.07
ATOM	7375	O	ASP	K	104	105.783	6.028	20.671	1.00	16.12
ATOM	7376	CB	ASP	K	104	107.287	6.840	18.079	1.00	2.00
ATOM	7377	CG	ASP	K	104	106.576	8.124	18.489	1.00	9.26
ATOM	7378	OD1	ASP	K	104	107.126	8.824	19.394	1.00	8.46

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ATOM	7379	OD2	ASP	K	104	105.507	8.454	17.885	1.00	14.19
ATOM	7380	N	MET	K	105	107.515	4.628	20.561	1.00	12.12
ATOM	7381	CA	MET	K	105	107.618	4.489	22.026	1.00	10.62
ATOM	7382	C	MET	K	105	108.763	5.396	22.364	1.00	8.65
ATOM	7383	O	MET	K	105	109.872	4.919	22.383	1.00	13.38
ATOM	7384	CB	MET	K	105	107.979	3.046	22.425	1.00	2.00
ATOM	7385	CG	MET	K	105	107.622	2.071	21.325	1.00	7.98
ATOM	7386	SD	MET	K	105	107.394	0.251	21.736	1.00	8.92
ATOM	7387	CE	MET	K	105	108.288	0.164	23.206	1.00	11.64
ATOM	7388	N	ASP	K	106	108.495	6.659	22.696	1.00	8.37
ATOM	7389	CA	ASP	K	106	109.553	7.659	22.938	1.00	9.89
ATOM	7390	C	ASP	K	106	110.323	7.863	24.269	1.00	7.86
ATOM	7391	O	ASP	K	106	111.142	8.781	24.309	1.00	6.57
ATOM	7392	CB	ASP	K	106	109.047	9.043	22.477	1.00	6.86
ATOM	7393	CG	ASP	K	106	108.072	9.687	23.465	1.00	6.97
ATOM	7394	OD1	ASP	K	106	107.888	9.205	24.618	1.00	2.00
ATOM	7395	OD2	ASP	K	106	107.484	10.710	23.068	1.00	8.92
ATOM	7396	N	SER	K	107	110.067	7.093	25.341	1.00	6.32
ATOM	7397	CA	SER	K	107	110.846	7.234	26.611	1.00	8.16
ATOM	7398	C	SER	K	107	110.838	5.951	27.376	1.00	6.48
ATOM	7399	O	SER	K	107	109.801	5.320	27.457	1.00	14.70
ATOM	7400	CB	SER	K	107	110.310	8.327	27.499	1.00	4.54
ATOM	7401	OG	SER	K	107	110.120	9.485	26.714	1.00	20.91
ATOM	7402	N	TRP	K	108	111.984	5.529	27.904	1.00	4.03
ATOM	7403	CA	TRP	K	108	112.029	4.247	28.612	1.00	3.18
ATOM	7404	C	TRP	K	108	112.606	4.320	30.017	1.00	5.42
ATOM	7405	O	TRP	K	108	113.454	5.156	30.317	1.00	11.40
ATOM	7406	CB	TRP	K	108	112.834	3.211	27.812	1.00	2.00
ATOM	7407	CG	TRP	K	108	112.421	2.995	26.383	1.00	2.00
ATOM	7408	CD1	TRP	K	108	112.203	3.940	25.452	1.00	2.53
ATOM	7409	CD2	TRP	K	108	112.138	1.752	25.766	1.00	2.00
ATOM	7410	NE1	TRP	K	108	111.783	3.371	24.283	1.00	2.00
ATOM	7411	CE2	TRP	K	108	111.741	2.017	24.453	1.00	2.00
ATOM	7412	CE3	TRP	K	108	112.179	0.436	26.201	1.00	2.00
ATOM	7413	CZ2	TRP	K	108	111.384	1.023	23.565	1.00	2.56
ATOM	7414	CZ3	TRP	K	108	111.827	-0.546	25.347	1.00	2.00
ATOM	7415	CH2	TRP	K	108	111.431	-0.262	24.033	1.00	5.00
ATOM	7416	N	GLY	K	109	112.104	3.467	30.900	1.00	6.53
ATOM	7417	CA	GLY	K	109	112.625	3.429	32.256	1.00	4.20
ATOM	7418	C	GLY	K	109	113.919	2.675	32.151	1.00	4.10
ATOM	7419	O	GLY	K	109	114.179	2.118	31.073	1.00	7.42
ATOM	7420	N	GLN	K	110	114.707	2.638	33.228	1.00	2.74
ATOM	7421	CA	GLN	K	110	116.010	1.946	33.226	1.00	7.21
ATOM	7422	C	GLN	K	110	115.914	0.550	32.739	1.00	10.54
ATOM	7423	O	GLN	K	110	116.764	0.075	31.963	1.00	16.25
ATOM	7424	CB	GLN	K	110	116.593	1.846	34.584	1.00	2.00
ATOM	7425	CG	GLN	K	110	116.293	3.018	35.354	1.00	12.97
ATOM	7426	CD	GLN	K	110	115.292	2.688	36.351	1.00	16.84
ATOM	7427	OE1	GLN	K	110	115.431	1.674	37.042	1.00	22.74
ATOM	7428	NE2	GLN	K	110	114.242	3.512	36.445	1.00	19.51
ATOM	7429	N	GLY	K	111	114.850	-0.083	33.195	1.00	8.22
ATOM	7430	CA	GLY	K	111	114.558	-1.450	32.860	1.00	9.17
ATOM	7431	C	GLY	K	111	114.586	-2.201	34.156	1.00	8.25
ATOM	7432	O	GLY	K	111	115.167	-1.696	35.114	1.00	10.00
ATOM	7433	N	THR	K	112	113.954	-3.371	34.214	1.00	9.80
ATOM	7434	CA	THR	K	112	113.993	-4.130	35.446	1.00	12.87
ATOM	7435	C	THR	K	112	114.372	-5.549	35.135	1.00	12.24
ATOM	7436	O	THR	K	112	113.798	-6.200	34.246	1.00	11.14
ATOM	7437	CB	THR	K	112	112.654	-4.107	36.247	1.00	15.49
ATOM	7438	OG1	THR	K	112	112.336	-2.762	36.662	1.00	19.09

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ATOM	7439	CG2	THR	K	112	112.808	-4.970	37.495	1.00	8.45
ATOM	7440	N	LEU	K	113	115.383	-6.005	35.859	1.00	8.88
ATOM	7441	CA	LEU	K	113	115.862	-7.328	35.644	1.00	13.94
ATOM	7442	C	LEU	K	113	115.055	-8.258	36.497	1.00	15.64
ATOM	7443	O	LEU	K	113	115.175	-8.244	37.705	1.00	18.39
ATOM	7444	CB	LEU	K	113	117.374	-7.427	35.983	1.00	13.76
ATOM	7445	CG	LEU	K	113	118.254	-8.504	35.292	1.00	12.59
ATOM	7446	CD1	LEU	K	113	118.344	-9.738	36.135	1.00	15.85
ATOM	7447	CD2	LEU	K	113	117.648	-8.914	33.958	1.00	21.89
ATOM	7448	N	VAL	K	114	114.193	-9.043	35.879	1.00	15.63
ATOM	7449	CA	VAL	K	114	113.452	-9.998	36.662	1.00	20.45
ATOM	7450	C	VAL	K	114	114.115	-11.341	36.333	1.00	22.59
ATOM	7451	O	VAL	K	114	114.062	-11.816	35.184	1.00	26.74
ATOM	7452	CB	VAL	K	114	111.934	-9.998	36.286	1.00	22.56
ATOM	7453	CG1	VAL	K	114	111.308	-11.382	36.537	1.00	27.91
ATOM	7454	CG2	VAL	K	114	111.196	-9.003	37.138	1.00	16.56
ATOM	7455	N	THR	K	115	114.758	-11.949	37.323	1.00	19.42
ATOM	7456	CA	THR	K	115	115.420	-13.232	37.096	1.00	20.84
ATOM	7457	C	THR	K	115	114.735	-14.257	37.968	1.00	21.22
ATOM	7458	O	THR	K	115	114.736	-14.145	39.202	1.00	19.36
ATOM	7459	CB	THR	K	115	116.954	-13.139	37.438	1.00	23.91
ATOM	7460	OG1	THR	K	115	117.420	-14.361	38.047	1.00	19.73
ATOM	7461	CG2	THR	K	115	117.209	-11.947	38.385	1.00	20.22
ATOM	7462	N	VAL	K	116	114.145	-15.257	37.333	1.00	20.53
ATOM	7463	CA	VAL	K	116	113.454	-16.274	38.094	1.00	21.39
ATOM	7464	C	VAL	K	116	114.134	-17.634	38.060	1.00	24.16
ATOM	7465	O	VAL	K	116	114.177	-18.300	37.031	1.00	25.25
ATOM	7466	CB	VAL	K	116	111.981	-16.375	37.621	1.00	22.81
ATOM	7467	CG1	VAL	K	116	111.414	-14.969	37.476	1.00	18.75
ATOM	7468	CG2	VAL	K	116	111.870	-17.109	36.290	1.00	16.61
ATOM	7469	N	SER	K	117	114.678	-18.045	39.199	1.00	29.77
ATOM	7470	CA	SER	K	117	115.348	-19.342	39.301	1.00	35.29
ATOM	7471	C	SER	K	117	115.179	-19.981	40.680	1.00	38.18
ATOM	7472	O	SER	K	117	114.957	-19.302	41.680	1.00	37.72
ATOM	7473	CB	SER	K	117	116.847	-19.203	39.014	1.00	39.64
ATOM	7474	OG	SER	K	117	117.628	-19.451	40.181	1.00	40.49
ATOM	7475	N	SER	K	118	115.334	-21.296	40.720	1.00	40.60
ATOM	7476	CA	SER	K	118	115.220	-22.067	41.951	1.00	43.48
ATOM	7477	C	SER	K	118	116.503	-21.962	42.786	1.00	45.80
ATOM	7478	O	SER	K	118	116.480	-22.141	44.010	1.00	46.14
ATOM	7479	CB	SER	K	118	114.959	-23.517	41.593	1.00	44.06
ATOM	7480	OG	SER	K	118	115.067	-23.681	40.188	1.00	51.11
ATOM	7481	N	ALA	K	119	117.621	-21.702	42.109	1.00	48.40
ATOM	7482	CA	ALA	K	119	118.920	-21.539	42.757	1.00	47.53
ATOM	7483	C	ALA	K	119	118.810	-20.540	43.895	1.00	46.05
ATOM	7484	O	ALA	K	119	117.856	-19.788	43.981	1.00	47.02
ATOM	7485	CB	ALA	K	119	119.928	-21.054	41.753	1.00	48.83
ATOM	7486	N	SER	K	120	119.789	-20.520	44.770	1.00	45.27
ATOM	7487	CA	SER	K	120	119.725	-19.604	45.884	1.00	44.58
ATOM	7488	C	SER	K	120	121.097	-19.037	46.074	1.00	41.66
ATOM	7489	O	SER	K	120	122.070	-19.774	46.028	1.00	42.35
ATOM	7490	CB	SER	K	120	119.306	-20.371	47.126	1.00	50.85
ATOM	7491	OG	SER	K	120	118.248	-21.264	46.810	1.00	60.33
ATOM	7492	N	THR	K	121	121.159	-17.740	46.337	1.00	40.31
ATOM	7493	CA	THR	K	121	122.410	-17.014	46.536	1.00	38.40
ATOM	7494	C	THR	K	121	123.519	-17.927	46.948	1.00	40.53
ATOM	7495	O	THR	K	121	123.322	-18.837	47.748	1.00	47.01
ATOM	7496	CB	THR	K	121	122.253	-15.948	47.601	1.00	37.31
ATOM	7497	OG1	THR	K	121	121.642	-14.809	47.006	1.00	37.79
ATOM	7498	CG2	THR	K	121	123.575	-15.540	48.185	1.00	33.10

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ATOM	7499	N	LYS	K	122	124.701	-17.656	46.430	1.00	40.09
ATOM	7500	CA	LYS	K	122	125.837	-18.488	46.721	1.00	40.65
ATOM	7501	C	LYS	K	122	127.055	-17.795	46.162	1.00	39.94
ATOM	7502	O	LYS	K	122	126.971	-17.158	45.132	1.00	39.45
ATOM	7503	CB	LYS	K	122	125.614	-19.863	46.078	1.00	39.07
ATOM	7504	CG	LYS	K	122	126.708	-20.357	45.206	1.00	41.95
ATOM	7505	CD	LYS	K	122	127.099	-21.792	45.566	1.00	50.37
ATOM	7506	CE	LYS	K	122	128.243	-21.841	46.622	1.00	56.38
ATOM	7507	NZ	LYS	K	122	129.556	-21.298	46.116	1.00	55.08
ATOM	7508	N	GLY	K	123	128.180	-17.866	46.854	1.00	42.53
ATOM	7509	CA	GLY	K	123	129.358	-17.237	46.294	1.00	41.98
ATOM	7510	C	GLY	K	123	129.934	-18.101	45.178	1.00	42.30
ATOM	7511	O	GLY	K	123	129.509	-19.241	44.942	1.00	39.46
ATOM	7512	N	PRO	K	124	130.901	-17.572	44.436	1.00	42.14
ATOM	7513	CA	PRO	K	124	131.475	-18.390	43.368	1.00	45.89
ATOM	7514	C	PRO	K	124	132.646	-19.272	43.845	1.00	47.96
ATOM	7515	O	PRO	K	124	133.003	-19.309	45.031	1.00	48.52
ATOM	7516	CB	PRO	K	124	131.953	-17.355	42.374	1.00	42.43
ATOM	7517	CG	PRO	K	124	132.413	-16.249	43.249	1.00	38.43
ATOM	7518	CD	PRO	K	124	131.494	-16.227	44.457	1.00	39.92
ATOM	7519	N	SER	K	125	133.229	-19.990	42.895	1.00	45.20
ATOM	7520	CA	SER	K	125	134.375	-20.821	43.167	1.00	42.42
ATOM	7521	C	SER	K	125	135.334	-20.196	42.184	1.00	40.46
ATOM	7522	O	SER	K	125	134.909	-19.738	41.137	1.00	41.20
ATOM	7523	CB	SER	K	125	134.092	-22.269	42.792	1.00	44.93
ATOM	7524	OG	SER	K	125	133.386	-22.921	43.831	1.00	49.50
ATOM	7525	N	VAL	K	126	136.612	-20.142	42.528	1.00	37.57
ATOM	7526	CA	VAL	K	126	137.616	-19.557	41.660	1.00	30.66
ATOM	7527	C	VAL	K	126	138.694	-20.610	41.407	1.00	29.48
ATOM	7528	O	VAL	K	126	139.070	-21.386	42.294	1.00	28.72
ATOM	7529	CB	VAL	K	126	138.225	-18.391	42.345	1.00	30.40
ATOM	7530	CG1	VAL	K	126	137.184	-17.319	42.532	1.00	28.31
ATOM	7531	CG2	VAL	K	126	138.747	-18.862	43.717	1.00	36.94
ATOM	7532	N	PHE	K	127	139.194	-20.645	40.188	1.00	27.90
ATOM	7533	CA	PHE	K	127	140.208	-21.624	39.864	1.00	29.52
ATOM	7534	C	PHE	K	127	141.257	-21.016	38.983	1.00	33.53
ATOM	7535	O	PHE	K	127	140.946	-20.396	37.968	1.00	40.59
ATOM	7536	CB	PHE	K	127	139.538	-22.795	39.208	1.00	26.84
ATOM	7537	CG	PHE	K	127	138.526	-23.424	40.083	1.00	26.52
ATOM	7538	CD1	PHE	K	127	138.923	-24.182	41.171	1.00	24.93
ATOM	7539	CD2	PHE	K	127	137.176	-23.232	39.852	1.00	29.06
ATOM	7540	CE1	PHE	K	127	137.997	-24.737	42.008	1.00	29.67
ATOM	7541	CE2	PHE	K	127	136.225	-23.791	40.700	1.00	28.02
ATOM	7542	CZ	PHE	K	127	136.634	-24.545	41.775	1.00	28.69
ATOM	7543	N	PRO	K	128	142.526	-21.209	39.333	1.00	32.43
ATOM	7544	CA	PRO	K	128	143.487	-20.573	38.447	1.00	32.75
ATOM	7545	C	PRO	K	128	143.405	-21.211	37.089	1.00	33.92
ATOM	7546	O	PRO	K	128	143.069	-22.390	36.978	1.00	34.06
ATOM	7547	CB	PRO	K	128	144.825	-20.827	39.132	1.00	32.02
ATOM	7548	CG	PRO	K	128	144.595	-22.096	39.874	1.00	34.40
ATOM	7549	CD	PRO	K	128	143.182	-22.002	40.380	1.00	32.05
ATOM	7550	N	LEU	K	129	143.630	-20.397	36.064	1.00	33.82
ATOM	7551	CA	LEU	K	129	143.698	-20.860	34.685	1.00	33.90
ATOM	7552	C	LEU	K	129	145.148	-20.438	34.512	1.00	37.31
ATOM	7553	O	LEU	K	129	145.445	-19.384	33.735	1.00	38.21
ATOM	7554	CB	LEU	K	129	142.820	-20.033	33.776	1.00	27.47
ATOM	7555	CG	LEU	K	129	141.388	-19.833	34.185	1.00	25.93
ATOM	7556	CD1	LEU	K	129	140.851	-18.671	33.375	1.00	24.89
ATOM	7557	CD2	LEU	K	129	140.610	-21.123	33.957	1.00	27.59
ATOM	7558	N	ALA	K	130	146.039	-21.253	35.074	1.00	38.72

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ATOM	7559	CA	ALA	K	130	147.463	-20.965	35.076	1.00	38.26
ATOM	7560	C	ALA	K	130	148.240	-21.104	33.761	1.00	39.11
ATOM	7561	O	ALA	K	130	147.976	-21.987	32.916	1.00	36.46
ATOM	7562	CB	ALA	K	130	148.140	-21.773	36.182	1.00	33.59
ATOM	7563	N	PRO	K	131	149.196	-20.182	33.561	1.00	38.75
ATOM	7564	CA	PRO	K	131	150.019	-20.198	32.360	1.00	37.95
ATOM	7565	C	PRO	K	131	150.775	-21.527	32.281	1.00	38.12
ATOM	7566	O	PRO	K	131	151.082	-22.169	33.295	1.00	35.68
ATOM	7567	CB	PRO	K	131	150.966	-19.002	32.553	1.00	39.36
ATOM	7568	CG	PRO	K	131	150.919	-18.684	34.052	1.00	38.29
ATOM	7569	CD	PRO	K	131	149.527	-19.050	34.451	1.00	39.08
ATOM	7570	N	SER	K	132	151.091	-21.916	31.060	1.00	39.42
ATOM	7571	CA	SER	K	132	151.809	-23.146	30.800	1.00	40.30
ATOM	7572	C	SER	K	132	152.170	-23.058	29.327	1.00	43.14
ATOM	7573	O	SER	K	132	151.647	-22.211	28.594	1.00	42.20
ATOM	7574	CB	SER	K	132	150.910	-24.365	31.037	1.00	37.00
ATOM	7575	OG	SER	K	132	150.124	-24.633	29.887	1.00	35.06
ATOM	7576	N	SER	K	133	153.077	-23.921	28.900	1.00	45.12
ATOM	7577	CA	SER	K	133	153.484	-23.947	27.515	1.00	47.30
ATOM	7578	C	SER	K	133	152.218	-23.982	26.676	1.00	48.08
ATOM	7579	O	SER	K	133	152.148	-23.359	25.609	1.00	49.41
ATOM	7580	CB	SER	K	133	154.309	-25.190	27.261	1.00	49.74
ATOM	7581	OG	SER	K	133	154.101	-26.113	28.316	1.00	57.59
ATOM	7582	N	LYS	K	134	151.207	-24.680	27.197	1.00	47.20
ATOM	7583	CA	LYS	K	134	149.913	-24.836	26.522	1.00	48.46
ATOM	7584	C	LYS	K	134	149.084	-23.541	26.431	1.00	47.17
ATOM	7585	O	LYS	K	134	148.034	-23.513	25.774	1.00	44.45
ATOM	7586	CB	LYS	K	134	149.096	-25.938	27.209	1.00	48.47
ATOM	7587	CG	LYS	K	134	149.950	-26.893	28.024	1.00	57.07
ATOM	7588	CD	LYS	K	134	149.317	-27.218	29.382	1.00	61.00
ATOM	7589	CE	LYS	K	134	150.346	-27.688	30.436	1.00	61.12
ATOM	7590	NZ	LYS	K	134	151.771	-27.277	30.188	1.00	64.25
ATOM	7591	N	SER	K	135	149.587	-22.473	27.053	1.00	45.49
ATOM	7592	CA	SER	K	135	148.927	-21.170	27.069	1.00	43.24
ATOM	7593	C	SER	K	135	149.942	-20.029	26.874	1.00	42.56
ATOM	7594	O	SER	K	135	149.791	-18.915	27.418	1.00	37.61
ATOM	7595	CB	SER	K	135	148.185	-21.002	28.395	1.00	44.40
ATOM	7596	OG	SER	K	135	149.040	-20.515	29.417	1.00	42.53
ATOM	7597	N	THR	K	136	150.969	-20.314	26.071	1.00	42.79
ATOM	7598	CA	THR	K	136	152.013	-19.330	25.804	1.00	42.66
ATOM	7599	C	THR	K	136	152.364	-19.160	24.334	1.00	41.86
ATOM	7600	O	THR	K	136	153.386	-19.652	23.859	1.00	41.14
ATOM	7601	CB	THR	K	136	153.297	-19.660	26.565	1.00	40.54
ATOM	7602	OG1	THR	K	136	153.026	-19.678	27.972	1.00	40.70
ATOM	7603	CG2	THR	K	136	154.354	-18.602	26.281	1.00	41.50
ATOM	7604	N	SER	K	137	151.496	-18.462	23.616	1.00	42.20
ATOM	7605	CA	SER	K	137	151.718	-18.207	22.205	1.00	42.27
ATOM	7606	C	SER	K	137	152.805	-17.153	22.144	1.00	41.45
ATOM	7607	O	SER	K	137	152.740	-16.179	22.888	1.00	40.77
ATOM	7608	CB	SER	K	137	150.413	-17.711	21.526	1.00	41.79
ATOM	7609	OG	SER	K	137	149.460	-18.775	21.386	1.00	41.18
ATOM	7610	N	GLY	K	138	153.801	-17.376	21.278	1.00	44.61
ATOM	7611	CA	GLY	K	138	154.920	-16.448	21.099	1.00	43.47
ATOM	7612	C	GLY	K	138	155.485	-15.940	22.409	1.00	42.75
ATOM	7613	O	GLY	K	138	155.486	-16.650	23.420	1.00	44.33
ATOM	7614	N	GLY	K	139	155.938	-14.700	22.434	1.00	41.07
ATOM	7615	CA	GLY	K	139	156.495	-14.213	23.684	1.00	43.36
ATOM	7616	C	GLY	K	139	155.489	-13.958	24.805	1.00	43.73
ATOM	7617	O	GLY	K	139	155.872	-13.637	25.939	1.00	45.90
ATOM	7618	N	THR	K	140	154.201	-14.100	24.501	1.00	40.76

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ATOM	7619	CA	THR	K	140	153.160	-13.829	25.481	1.00	34.44
ATOM	7620	C	THR	K	140	152.492	-15.047	26.098	1.00	31.94
ATOM	7621	O	THR	K	140	152.283	-16.067	25.438	1.00	27.93
ATOM	7622	CB	THR	K	140	152.064	-12.975	24.866	1.00	36.29
ATOM	7623	OG1	THR	K	140	150.842	-13.711	24.930	1.00	37.97
ATOM	7624	CG2	THR	K	140	152.381	-12.635	23.380	1.00	37.93
ATOM	7625	N	ALA	K	141	152.120	-14.897	27.369	1.00	33.70
ATOM	7626	CA	ALA	K	141	151.466	-15.954	28.150	1.00	32.69
ATOM	7627	C	ALA	K	141	150.052	-15.561	28.512	1.00	33.78
ATOM	7628	O	ALA	K	141	149.791	-14.401	28.845	1.00	37.01
ATOM	7629	CB	ALA	K	141	152.215	-16.200	29.416	1.00	28.36
ATOM	7630	N	ALA	K	142	149.138	-16.524	28.448	1.00	32.17
ATOM	7631	CA	ALA	K	142	147.745	-16.272	28.806	1.00	28.77
ATOM	7632	C	ALA	K	142	147.502	-16.858	30.196	1.00	25.39
ATOM	7633	O	ALA	K	142	148.036	-17.914	30.528	1.00	23.70
ATOM	7634	CB	ALA	K	142	146.805	-16.929	27.781	1.00	25.64
ATOM	7635	N	LEU	K	143	146.712	-16.177	31.014	1.00	22.99
ATOM	7636	CA	LEU	K	143	146.428	-16.700	32.335	1.00	20.44
ATOM	7637	C	LEU	K	143	145.220	-15.948	32.891	1.00	23.79
ATOM	7638	O	LEU	K	143	144.920	-14.839	32.439	1.00	21.78
ATOM	7639	CB	LEU	K	143	147.695	-16.576	33.209	1.00	12.87
ATOM	7640	CG	LEU	K	143	147.959	-15.593	34.358	1.00	14.12
ATOM	7641	CD1	LEU	K	143	149.035	-14.678	33.937	1.00	11.07
ATOM	7642	CD2	LEU	K	143	146.706	-14.776	34.757	1.00	21.37
ATOM	7643	N	GLY	K	144	144.516	-16.571	33.840	1.00	30.18
ATOM	7644	CA	GLY	K	144	143.343	-15.952	34.467	1.00	32.99
ATOM	7645	C	GLY	K	144	142.545	-16.826	35.439	1.00	30.34
ATOM	7646	O	GLY	K	144	142.917	-17.976	35.700	1.00	30.93
ATOM	7647	N	CYS	K	145	141.445	-16.293	35.972	1.00	26.53
ATOM	7648	CA	CYS	K	145	140.618	-17.057	36.908	1.00	19.35
ATOM	7649	C	CYS	K	145	139.313	-17.582	36.371	1.00	13.73
ATOM	7650	O	CYS	K	145	138.689	-16.974	35.515	1.00	15.10
ATOM	7651	CB	CYS	K	145	140.313	-16.224	38.118	1.00	18.49
ATOM	7652	SG	CYS	K	145	141.831	-16.020	39.054	1.00	26.07
ATOM	7653	N	LEU	K	146	138.913	-18.740	36.862	1.00	9.12
ATOM	7654	CA	LEU	K	146	137.640	-19.307	36.472	1.00	13.28
ATOM	7655	C	LEU	K	146	136.725	-19.166	37.697	1.00	17.42
ATOM	7656	O	LEU	K	146	136.923	-19.845	38.706	1.00	17.70
ATOM	7657	CB	LEU	K	146	137.778	-20.783	36.101	1.00	11.17
ATOM	7658	CG	LEU	K	146	136.442	-21.529	36.162	1.00	6.09
ATOM	7659	CD1	LEU	K	146	135.358	-20.545	35.702	1.00	9.44
ATOM	7660	CD2	LEU	K	146	136.429	-22.765	35.269	1.00	4.37
ATOM	7661	N	VAL	K	147	135.754	-18.257	37.602	1.00	19.05
ATOM	7662	CA	VAL	K	147	134.786	-17.978	38.657	1.00	21.03
ATOM	7663	C	VAL	K	147	133.535	-18.863	38.470	1.00	23.88
ATOM	7664	O	VAL	K	147	132.584	-18.478	37.816	1.00	22.31
ATOM	7665	CB	VAL	K	147	134.441	-16.457	38.621	1.00	18.13
ATOM	7666	CG1	VAL	K	147	133.666	-16.039	39.836	1.00	24.60
ATOM	7667	CG2	VAL	K	147	135.710	-15.661	38.585	1.00	13.56
ATOM	7668	N	LYS	K	148	133.551	-20.053	39.061	1.00	28.26
ATOM	7669	CA	LYS	K	148	132.469	-21.010	38.911	1.00	32.60
ATOM	7670	C	LYS	K	148	131.386	-21.046	39.967	1.00	37.75
ATOM	7671	O	LYS	K	148	131.639	-20.743	41.136	1.00	36.46
ATOM	7672	CB	LYS	K	148	133.057	-22.396	38.794	1.00	31.68
ATOM	7673	CG	LYS	K	148	132.920	-22.963	37.422	1.00	33.62
ATOM	7674	CD	LYS	K	148	131.635	-23.724	37.250	1.00	33.23
ATOM	7675	CE	LYS	K	148	131.894	-25.213	37.138	1.00	34.47
ATOM	7676	NZ	LYS	K	148	131.809	-25.898	38.466	1.00	41.87
ATOM	7677	N	ASP	K	149	130.195	-21.465	39.501	1.00	39.30
ATOM	7678	CA	ASP	K	149	128.944	-21.612	40.258	1.00	37.64

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ATOM	7679	C	ASP	K	149	128.640	-20.629	41.403	1.00	39.90
ATOM	7680	O	ASP	K	149	129.022	-20.815	42.575	1.00	38.31
ATOM	7681	CB	ASP	K	149	128.822	-23.034	40.773	1.00	36.91
ATOM	7682	CG	ASP	K	149	129.491	-24.012	39.886	1.00	35.44
ATOM	7683	OD1	ASP	K	149	129.142	-24.018	38.699	1.00	36.75
ATOM	7684	OD2	ASP	K	149	130.354	-24.765	40.373	1.00	35.21
ATOM	7685	N	TYR	K	150	127.938	-19.570	41.045	1.00	37.75
ATOM	7686	CA	TYR	K	150	127.554	-18.570	42.007	1.00	37.60
ATOM	7687	C	TYR	K	150	126.241	-18.087	41.484	1.00	37.18
ATOM	7688	O	TYR	K	150	125.877	-18.440	40.372	1.00	32.64
ATOM	7689	CB	TYR	K	150	128.556	-17.445	42.045	1.00	41.54
ATOM	7690	CG	TYR	K	150	128.689	-16.722	40.731	1.00	46.67
ATOM	7691	CD1	TYR	K	150	128.436	-15.363	40.639	1.00	45.55
ATOM	7692	CD2	TYR	K	150	129.082	-17.400	39.574	1.00	47.23
ATOM	7693	CE1	TYR	K	150	128.565	-14.704	39.443	1.00	45.73
ATOM	7694	CE2	TYR	K	150	129.216	-16.742	38.368	1.00	42.48
ATOM	7695	CZ	TYR	K	150	128.950	-15.394	38.310	1.00	43.57
ATOM	7696	OH	TYR	K	150	129.009	-14.716	37.116	1.00	42.58
ATOM	7697	N	PHE	K	151	125.541	-17.280	42.280	1.00	40.63
ATOM	7698	CA	PHE	K	151	124.205	-16.796	41.927	1.00	38.02
ATOM	7699	C	PHE	K	151	123.743	-15.760	42.941	1.00	35.13
ATOM	7700	O	PHE	K	151	123.951	-15.930	44.143	1.00	36.43
ATOM	7701	CB	PHE	K	151	123.252	-17.987	41.964	1.00	41.25
ATOM	7702	CG	PHE	K	151	121.833	-17.658	41.637	1.00	43.38
ATOM	7703	CD1	PHE	K	151	121.125	-16.723	42.373	1.00	42.93
ATOM	7704	CD2	PHE	K	151	121.200	-18.296	40.585	1.00	45.61
ATOM	7705	CE1	PHE	K	151	119.820	-16.428	42.061	1.00	44.13
ATOM	7706	CE2	PHE	K	151	119.891	-18.007	40.269	1.00	45.96
ATOM	7707	CZ	PHE	K	151	119.199	-17.071	41.007	1.00	45.87
ATOM	7708	N	PRO	K	152	123.123	-14.667	42.472	1.00	33.97
ATOM	7709	CA	PRO	K	152	122.838	-14.313	41.081	1.00	34.63
ATOM	7710	C	PRO	K	152	123.973	-13.428	40.612	1.00	37.12
ATOM	7711	O	PRO	K	152	124.950	-13.212	41.330	1.00	40.43
ATOM	7712	CB	PRO	K	152	121.592	-13.485	41.198	1.00	32.97
ATOM	7713	CG	PRO	K	152	121.894	-12.667	42.440	1.00	31.24
ATOM	7714	CD	PRO	K	152	122.620	-13.620	43.379	1.00	33.12
ATOM	7715	N	GLU	K	153	123.854	-12.891	39.410	1.00	38.24
ATOM	7716	CA	GLU	K	153	124.902	-11.998	38.948	1.00	39.05
ATOM	7717	C	GLU	K	153	124.790	-10.813	39.863	1.00	38.73
ATOM	7718	O	GLU	K	153	123.808	-10.683	40.594	1.00	42.71
ATOM	7719	CB	GLU	K	153	124.672	-11.536	37.513	1.00	39.93
ATOM	7720	CG	GLU	K	153	125.038	-12.584	36.466	1.00	48.86
ATOM	7721	CD	GLU	K	153	126.152	-12.128	35.524	1.00	56.42
ATOM	7722	OE1	GLU	K	153	125.871	-12.100	34.293	1.00	58.10
ATOM	7723	OE2	GLU	K	153	127.285	-11.810	36.019	1.00	55.14
ATOM	7724	N	PRO	K	154	125.811	-9.956	39.883	1.00	37.80
ATOM	7725	CA	PRO	K	154	127.054	-10.000	39.123	1.00	33.84
ATOM	7726	C	PRO	K	154	128.228	-10.346	40.044	1.00	35.16
ATOM	7727	O	PRO	K	154	128.183	-10.078	41.248	1.00	37.84
ATOM	7728	CB	PRO	K	154	127.167	-8.584	38.633	1.00	29.24
ATOM	7729	CG	PRO	K	154	126.651	-7.786	39.825	1.00	33.31
ATOM	7730	CD	PRO	K	154	125.750	-8.704	40.645	1.00	37.48
ATOM	7731	N	VAL	K	155	129.273	-10.934	39.467	1.00	37.13
ATOM	7732	CA	VAL	K	155	130.510	-11.253	40.196	1.00	38.91
ATOM	7733	C	VAL	K	155	131.536	-10.331	39.548	1.00	37.37
ATOM	7734	O	VAL	K	155	131.931	-10.533	38.414	1.00	34.60
ATOM	7735	CB	VAL	K	155	131.044	-12.673	39.973	1.00	39.69
ATOM	7736	CG1	VAL	K	155	130.996	-13.026	38.541	1.00	42.98
ATOM	7737	CG2	VAL	K	155	132.491	-12.722	40.384	1.00	42.23
ATOM	7738	N	THR	K	156	131.969	-9.309	40.253	1.00	39.70

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ATOM	7739	CA	THR	K	156	132.934	-8.420	39.664	1.00	37.59
ATOM	7740	C	THR	K	156	134.320	-9.075	39.892	1.00	40.28
ATOM	7741	O	THR	K	156	134.591	-9.719	40.930	1.00	40.66
ATOM	7742	CB	THR	K	156	132.827	-7.058	40.327	1.00	37.22
ATOM	7743	OG1	THR	K	156	133.821	-6.199	39.783	1.00	36.14
ATOM	7744	CG2	THR	K	156	133.022	-7.186	41.877	1.00	42.16
ATOM	7745	N	VAL	K	157	135.179	-8.921	38.892	1.00	40.81
ATOM	7746	CA	VAL	K	157	136.527	-9.484	38.909	1.00	40.83
ATOM	7747	C	VAL	K	157	137.593	-8.464	38.549	1.00	40.26
ATOM	7748	O	VAL	K	157	137.522	-7.826	37.496	1.00	40.86
ATOM	7749	CB	VAL	K	157	136.670	-10.597	37.902	1.00	41.17
ATOM	7750	CG1	VAL	K	157	138.090	-11.119	37.937	1.00	37.09
ATOM	7751	CG2	VAL	K	157	135.638	-11.668	38.179	1.00	46.41
ATOM	7752	N	SER	K	158	138.591	-8.318	39.409	1.00	40.12
ATOM	7753	CA	SER	K	158	139.652	-7.365	39.131	1.00	39.40
ATOM	7754	C	SER	K	158	141.000	-8.014	39.357	1.00	40.94
ATOM	7755	O	SER	K	158	141.117	-8.971	40.136	1.00	41.57
ATOM	7756	CB	SER	K	158	139.535	-6.140	40.014	1.00	38.19
ATOM	7757	OG	SER	K	158	140.805	-5.841	40.558	1.00	42.49
ATOM	7758	N	TRP	K	159	142.011	-7.477	38.672	1.00	39.39
ATOM	7759	CA	TRP	K	159	143.365	-7.988	38.756	1.00	36.75
ATOM	7760	C	TRP	K	159	144.327	-7.089	39.523	1.00	40.41
ATOM	7761	O	TRP	K	159	144.262	-5.840	39.456	1.00	37.31
ATOM	7762	CB	TRP	K	159	143.887	-8.238	37.360	1.00	33.02
ATOM	7763	CG	TRP	K	159	143.272	-9.417	36.733	1.00	27.32
ATOM	7764	CD1	TRP	K	159	142.166	-9.434	35.964	1.00	23.17
ATOM	7765	CD2	TRP	K	159	143.740	-10.767	36.808	1.00	25.92
ATOM	7766	NE1	TRP	K	159	141.900	-10.711	35.546	1.00	23.84
ATOM	7767	CE2	TRP	K	159	142.855	-11.554	36.045	1.00	23.99
ATOM	7768	CE3	TRP	K	159	144.824	-11.390	37.442	1.00	22.90
ATOM	7769	CZ2	TRP	K	159	143.011	-12.927	35.889	1.00	27.20
ATOM	7770	CZ3	TRP	K	159	144.983	-12.751	37.294	1.00	25.20
ATOM	7771	CH2	TRP	K	159	144.079	-13.512	36.520	1.00	28.23
ATOM	7772	N	ASN	K	160	145.214	-7.749	40.265	1.00	43.68
ATOM	7773	CA	ASN	K	160	146.193	-7.063	41.096	1.00	43.85
ATOM	7774	C	ASN	K	160	145.520	-5.811	41.599	1.00	45.45
ATOM	7775	O	ASN	K	160	145.914	-4.705	41.259	1.00	44.11
ATOM	7776	CB	ASN	K	160	147.440	-6.720	40.302	1.00	40.38
ATOM	7777	CG	ASN	K	160	148.259	-7.937	39.993	1.00	41.09
ATOM	7778	OD1	ASN	K	160	147.985	-9.021	40.511	1.00	40.58
ATOM	7779	ND2	ASN	K	160	149.264	-7.779	39.139	1.00	41.28
ATOM	7780	N	SER	K	161	144.457	-6.019	42.367	1.00	46.79
ATOM	7781	CA	SER	K	161	143.695	-4.943	42.956	1.00	47.01
ATOM	7782	C	SER	K	161	143.867	-3.657	42.187	1.00	47.45
ATOM	7783	O	SER	K	161	144.424	-2.665	42.683	1.00	44.83
ATOM	7784	CB	SER	K	161	144.119	-4.758	44.401	1.00	48.94
ATOM	7785	OG	SER	K	161	144.591	-5.993	44.910	1.00	54.86
ATOM	7786	N	GLY	K	162	143.413	-3.701	40.944	1.00	47.67
ATOM	7787	CA	GLY	K	162	143.457	-2.515	40.122	1.00	50.39
ATOM	7788	C	GLY	K	162	144.619	-2.289	39.189	1.00	50.16
ATOM	7789	O	GLY	K	162	144.423	-2.089	37.993	1.00	50.77
ATOM	7790	N	ALA	K	163	145.822	-2.274	39.746	1.00	51.72
ATOM	7791	CA	ALA	K	163	147.045	-2.056	38.972	1.00	50.96
ATOM	7792	C	ALA	K	163	147.042	-2.716	37.590	1.00	49.09
ATOM	7793	O	ALA	K	163	147.375	-2.072	36.592	1.00	50.50
ATOM	7794	CB	ALA	K	163	148.265	-2.524	39.777	1.00	52.14
ATOM	7795	N	LEU	K	164	146.653	-3.990	37.533	1.00	45.05
ATOM	7796	CA	LEU	K	164	146.602	-4.720	36.266	1.00	39.92
ATOM	7797	C	LEU	K	164	145.251	-4.538	35.567	1.00	40.21
ATOM	7798	O	LEU	K	164	144.216	-5.080	35.990	1.00	40.61



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ATOM	7799	CB	LEU	K	164	146.855	-6.199	36.510	1.00	34.23
ATOM	7800	CG	LEU	K	164	147.291	-6.899	35.227	1.00	33.56
ATOM	7801	CD1	LEU	K	164	148.414	-6.099	34.550	1.00	32.33
ATOM	7802	CD2	LEU	K	164	147.759	-8.294	35.537	1.00	32.45
ATOM	7803	N	THR	K	165	145.245	-3.750	34.505	1.00	39.35
ATOM	7804	CA	THR	K	165	144.002	-3.517	33.798	1.00	44.64
ATOM	7805	C	THR	K	165	144.254	-3.571	32.330	1.00	43.95
ATOM	7806	O	THR	K	165	143.414	-3.164	31.535	1.00	47.02
ATOM	7807	CB	THR	K	165	143.412	-2.136	34.102	1.00	46.13
ATOM	7808	OG1	THR	K	165	144.479	-1.209	34.326	1.00	48.42
ATOM	7809	CG2	THR	K	165	142.503	-2.192	35.331	1.00	52.86
ATOM	7810	N	SER	K	166	145.416	-4.079	31.965	1.00	41.08
ATOM	7811	CA	SER	K	166	145.745	-4.161	30.566	1.00	38.85
ATOM	7812	C	SER	K	166	145.821	-5.584	30.087	1.00	34.86
ATOM	7813	O	SER	K	166	146.530	-6.409	30.653	1.00	32.70
ATOM	7814	CB	SER	K	166	147.065	-3.470	30.285	1.00	43.17
ATOM	7815	OG	SER	K	166	147.354	-3.549	28.903	1.00	51.10
ATOM	7816	N	GLY	K	167	145.096	-5.873	29.021	1.00	32.90
ATOM	7817	CA	GLY	K	167	145.118	-7.226	28.509	1.00	34.09
ATOM	7818	C	GLY	K	167	144.077	-8.102	29.172	1.00	33.34
ATOM	7819	O	GLY	K	167	143.933	-9.284	28.848	1.00	35.66
ATOM	7820	N	VAL	K	168	143.359	-7.525	30.127	1.00	32.00
ATOM	7821	CA	VAL	K	168	142.315	-8.256	30.785	1.00	27.18
ATOM	7822	C	VAL	K	168	141.115	-8.348	29.866	1.00	25.14
ATOM	7823	O	VAL	K	168	140.782	-7.412	29.159	1.00	24.07
ATOM	7824	CB	VAL	K	168	141.883	-7.568	32.032	1.00	27.08
ATOM	7825	CG1	VAL	K	168	141.052	-8.548	32.848	1.00	33.77
ATOM	7826	CG2	VAL	K	168	143.103	-7.080	32.801	1.00	27.66
ATOM	7827	N	HIS	K	169	140.485	-9.508	29.869	1.00	24.23
ATOM	7828	CA	HIS	K	169	139.291	-9.752	29.095	1.00	24.42
ATOM	7829	C	HIS	K	169	138.480	-10.563	30.086	1.00	24.77
ATOM	7830	O	HIS	K	169	138.712	-11.762	30.224	1.00	20.56
ATOM	7831	CB	HIS	K	169	139.539	-10.654	27.888	1.00	27.76
ATOM	7832	CG	HIS	K	169	140.458	-10.088	26.854	1.00	30.85
ATOM	7833	ND1	HIS	K	169	140.124	-9.009	26.061	1.00	33.96
ATOM	7834	CD2	HIS	K	169	141.682	-10.492	26.449	1.00	37.58
ATOM	7835	CE1	HIS	K	169	141.119	-8.779	25.211	1.00	41.56
ATOM	7836	NE2	HIS	K	169	142.075	-9.663	25.428	1.00	34.46
ATOM	7837	N	THR	K	170	137.569	-9.930	30.821	1.00	27.53
ATOM	7838	CA	THR	K	170	136.744	-10.711	31.743	1.00	24.57
ATOM	7839	C	THR	K	170	135.373	-10.943	31.049	1.00	23.37
ATOM	7840	O	THR	K	170	134.596	-10.038	30.785	1.00	19.99
ATOM	7841	CB	THR	K	170	136.616	-10.025	33.106	1.00	17.78
ATOM	7842	OG1	THR	K	170	135.398	-10.437	33.738	1.00	13.77
ATOM	7843	CG2	THR	K	170	136.702	-8.535	32.945	1.00	17.40
ATOM	7844	N	PHE	K	171	135.143	-12.191	30.691	1.00	22.86
ATOM	7845	CA	PHE	K	171	133.958	-12.594	29.986	1.00	23.34
ATOM	7846	C	PHE	K	171	132.616	-12.429	30.641	1.00	25.97
ATOM	7847	O	PHE	K	171	132.485	-12.405	31.869	1.00	31.82
ATOM	7848	CB	PHE	K	171	134.115	-14.050	29.593	1.00	25.83
ATOM	7849	CG	PHE	K	171	135.237	-14.286	28.632	1.00	24.55
ATOM	7850	CD1	PHE	K	171	136.521	-14.484	29.103	1.00	18.47
ATOM	7851	CD2	PHE	K	171	135.007	-14.266	27.247	1.00	24.24
ATOM	7852	CE1	PHE	K	171	137.561	-14.650	28.227	1.00	23.44
ATOM	7853	CE2	PHE	K	171	136.051	-14.433	26.347	1.00	25.14
ATOM	7854	CZ	PHE	K	171	137.329	-14.623	26.831	1.00	24.41
ATOM	7855	N	PRO	K	172	131.575	-12.367	29.811	1.00	24.59
ATOM	7856	CA	PRO	K	172	130.219	-12.215	30.330	1.00	25.62
ATOM	7857	C	PRO	K	172	129.804	-13.541	30.971	1.00	27.03
ATOM	7858	O	PRO	K	172	130.273	-14.607	30.546	1.00	27.35

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ATOM	7859	CB	PRO K 172	129.416	-11.886	29.084	1.00	22.79
ATOM	7860	CG	PRO K 172	130.166	-12.533	27.999	1.00	18.28
ATOM	7861	CD	PRO K 172	131.599	-12.451	28.345	1.00	17.33
ATOM	7862	N	ALA K 173	128.960	-13.477	32.003	1.00	28.66
ATOM	7863	CA	ALA K 173	128.509	-14.691	32.684	1.00	27.05
ATOM	7864	C	ALA K 173	127.641	-15.514	31.755	1.00	25.70
ATOM	7865	O	ALA K 173	127.037	-14.981	30.810	1.00	20.03
ATOM	7866	CB	ALA K 173	127.757	-14.351	33.962	1.00	20.70
ATOM	7867	N	VAL K 174	127.646	-16.819	32.000	1.00	25.59
ATOM	7868	CA	VAL K 174	126.871	-17.744	31.203	1.00	28.10
ATOM	7869	C	VAL K 174	126.296	-18.804	32.102	1.00	34.11
ATOM	7870	O	VAL K 174	127.026	-19.629	32.674	1.00	39.84
ATOM	7871	CB	VAL K 174	127.710	-18.412	30.114	1.00	22.50
ATOM	7872	CG1	VAL K 174	127.179	-19.787	29.790	1.00	18.60
ATOM	7873	CG2	VAL K 174	127.638	-17.589	28.890	1.00	21.22
ATOM	7874	N	LEU K 175	124.975	-18.755	32.220	1.00	34.94
ATOM	7875	CA	LEU K 175	124.216	-19.675	33.048	1.00	34.56
ATOM	7876	C	LEU K 175	124.405	-21.075	32.590	1.00	33.42
ATOM	7877	O	LEU K 175	123.733	-21.474	31.660	1.00	30.90
ATOM	7878	CB	LEU K 175	122.731	-19.365	32.959	1.00	34.58
ATOM	7879	CG	LEU K 175	121.839	-19.800	34.105	1.00	27.68
ATOM	7880	CD1	LEU K 175	122.611	-19.985	35.453	1.00	30.89
ATOM	7881	CD2	LEU K 175	120.740	-18.803	34.153	1.00	25.72
ATOM	7882	N	GLN K 176	125.299	-21.820	33.235	1.00	36.12
ATOM	7883	CA	GLN K 176	125.529	-23.202	32.839	1.00	38.64
ATOM	7884	C	GLN K 176	124.282	-23.927	33.264	1.00	36.59
ATOM	7885	O	GLN K 176	123.452	-23.340	33.941	1.00	34.63
ATOM	7886	CB	GLN K 176	126.742	-23.777	33.565	1.00	40.93
ATOM	7887	CG	GLN K 176	126.776	-23.435	35.035	1.00	43.63
ATOM	7888	CD	GLN K 176	128.186	-23.266	35.575	1.00	44.75
ATOM	7889	OE1	GLN K 176	129.139	-23.927	35.117	1.00	43.59
ATOM	7890	NE2	GLN K 176	128.328	-22.381	36.564	1.00	41.87
ATOM	7891	N	SER K 177	124.134	-25.180	32.851	1.00	36.76
ATOM	7892	CA	SER K 177	122.988	-25.967	33.242	1.00	36.33
ATOM	7893	C	SER K 177	123.018	-25.922	34.749	1.00	39.80
ATOM	7894	O	SER K 177	123.810	-25.176	35.311	1.00	44.64
ATOM	7895	CB	SER K 177	123.160	-27.385	32.811	1.00	35.31
ATOM	7896	OG	SER K 177	122.360	-28.189	33.643	1.00	45.92
ATOM	7897	N	SER K 178	122.227	-26.731	35.438	1.00	37.95
ATOM	7898	CA	SER K 178	122.238	-26.584	36.879	1.00	38.90
ATOM	7899	C	SER K 178	121.723	-25.138	37.034	1.00	38.24
ATOM	7900	O	SER K 178	121.203	-24.560	36.082	1.00	40.94
ATOM	7901	CB	SER K 178	123.655	-26.692	37.426	1.00	38.18
ATOM	7902	OG	SER K 178	124.100	-25.419	37.854	1.00	37.92
ATOM	7903	N	GLY K 179	121.852	-24.508	38.182	1.00	35.13
ATOM	7904	CA	GLY K 179	121.285	-23.184	38.200	1.00	38.59
ATOM	7905	C	GLY K 179	122.196	-22.003	38.283	1.00	41.94
ATOM	7906	O	GLY K 179	121.750	-20.878	38.093	1.00	43.16
ATOM	7907	N	LEU K 180	123.467	-22.257	38.542	1.00	44.19
ATOM	7908	CA	LEU K 180	124.432	-21.188	38.720	1.00	46.16
ATOM	7909	C	LEU K 180	125.174	-20.682	37.487	1.00	47.25
ATOM	7910	O	LEU K 180	125.228	-21.365	36.462	1.00	47.58
ATOM	7911	CB	LEU K 180	125.435	-21.627	39.780	1.00	48.36
ATOM	7912	CG	LEU K 180	124.958	-22.817	40.621	1.00	47.21
ATOM	7913	CD1	LEU K 180	125.422	-24.092	39.979	1.00	47.47
ATOM	7914	CD2	LEU K 180	125.507	-22.722	42.035	1.00	51.42
ATOM	7915	N	TYR K 181	125.746	-19.477	37.617	1.00	47.42
ATOM	7916	CA	TYR K 181	126.521	-18.810	36.556	1.00	45.13
ATOM	7917	C	TYR K 181	127.995	-19.117	36.670	1.00	43.43
ATOM	7918	O	TYR K 181	128.466	-19.487	37.744	1.00	45.06

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ATOM	7919	CB	TYR	K	181	126.366	-17.303	36.651	1.00	46.44
ATOM	7920	CG	TYR	K	181	124.963	-16.861	36.408	1.00	47.83
ATOM	7921	CD1	TYR	K	181	124.368	-17.082	35.184	1.00	48.42
ATOM	7922	CD2	TYR	K	181	124.202	-16.274	37.415	1.00	49.28
ATOM	7923	CE1	TYR	K	181	123.049	-16.741	34.961	1.00	48.46
ATOM	7924	CE2	TYR	K	181	122.867	-15.927	37.195	1.00	48.80
ATOM	7925	CZ	TYR	K	181	122.310	-16.175	35.962	1.00	47.63
ATOM	7926	OH	TYR	K	181	120.997	-15.923	35.709	1.00	49.07
ATOM	7927	N	SER	K	182	128.720	-18.952	35.567	1.00	40.50
ATOM	7928	CA	SER	K	182	130.156	-19.201	35.553	1.00	38.82
ATOM	7929	C	SER	K	182	130.918	-18.395	34.521	1.00	35.92
ATOM	7930	O	SER	K	182	130.867	-18.687	33.338	1.00	38.84
ATOM	7931	CB	SER	K	182	130.447	-20.687	35.323	1.00	39.69
ATOM	7932	OG	SER	K	182	131.817	-20.928	35.032	1.00	37.12
ATOM	7933	N	LEU	K	183	131.648	-17.391	34.976	1.00	32.73
ATOM	7934	CA	LEU	K	183	132.447	-16.581	34.074	1.00	30.10
ATOM	7935	C	LEU	K	183	133.957	-16.772	34.378	1.00	32.35
ATOM	7936	O	LEU	K	183	134.367	-17.148	35.492	1.00	30.94
ATOM	7937	CB	LEU	K	183	132.045	-15.081	34.171	1.00	24.20
ATOM	7938	CG	LEU	K	183	132.507	-14.203	35.357	1.00	20.65
ATOM	7939	CD1	LEU	K	183	133.997	-13.968	35.377	1.00	18.20
ATOM	7940	CD2	LEU	K	183	131.808	-12.886	35.274	1.00	17.62
ATOM	7941	N	SER	K	184	134.776	-16.508	33.363	1.00	33.47
ATOM	7942	CA	SER	K	184	136.224	-16.607	33.471	1.00	29.61
ATOM	7943	C	SER	K	184	136.841	-15.284	33.084	1.00	26.10
ATOM	7944	O	SER	K	184	136.501	-14.726	32.043	1.00	22.06
ATOM	7945	CB	SER	K	184	136.752	-17.673	32.535	1.00	32.03
ATOM	7946	OG	SER	K	184	137.585	-18.561	33.245	1.00	38.31
ATOM	7947	N	SER	K	185	137.713	-14.766	33.947	1.00	28.13
ATOM	7948	CA	SER	K	185	138.407	-13.504	33.692	1.00	27.16
ATOM	7949	C	SER	K	185	139.826	-13.881	33.305	1.00	27.32
ATOM	7950	O	SER	K	185	140.540	-14.579	34.044	1.00	24.21
ATOM	7951	CB	SER	K	185	138.430	-12.595	34.936	1.00	26.07
ATOM	7952	OG	SER	K	185	138.613	-11.229	34.568	1.00	22.52
ATOM	7953	N	VAL	K	186	140.235	-13.400	32.140	1.00	26.94
ATOM	7954	CA	VAL	K	186	141.557	-13.706	31.635	1.00	25.23
ATOM	7955	C	VAL	K	186	142.390	-12.491	31.223	1.00	26.84
ATOM	7956	O	VAL	K	186	141.856	-11.446	30.849	1.00	30.82
ATOM	7957	CB	VAL	K	186	141.450	-14.643	30.484	1.00	21.44
ATOM	7958	CG1	VAL	K	186	142.700	-14.604	29.694	1.00	25.13
ATOM	7959	CG2	VAL	K	186	141.208	-16.031	31.013	1.00	24.14
ATOM	7960	N	VAL	K	187	143.709	-12.647	31.288	1.00	25.87
ATOM	7961	CA	VAL	K	187	144.651	-11.576	30.958	1.00	19.76
ATOM	7962	C	VAL	K	187	145.874	-12.169	30.324	1.00	18.26
ATOM	7963	O	VAL	K	187	146.315	-13.252	30.695	1.00	20.91
ATOM	7964	CB	VAL	K	187	145.125	-10.850	32.210	1.00	18.10
ATOM	7965	CG1	VAL	K	187	145.639	-11.843	33.201	1.00	20.27
ATOM	7966	CG2	VAL	K	187	146.189	-9.898	31.877	1.00	14.05
ATOM	7967	N	THR	K	188	146.427	-11.457	29.361	1.00	14.79
ATOM	7968	CA	THR	K	188	147.624	-11.932	28.728	1.00	9.90
ATOM	7969	C	THR	K	188	148.729	-10.990	29.162	1.00	13.15
ATOM	7970	O	THR	K	188	148.601	-9.756	29.133	1.00	17.40
ATOM	7971	CB	THR	K	188	147.457	-11.964	27.245	1.00	2.80
ATOM	7972	OG1	THR	K	188	147.348	-10.639	26.735	1.00	3.62
ATOM	7973	CG2	THR	K	188	146.197	-12.653	26.937	1.00	5.35
ATOM	7974	N	VAL	K	189	149.810	-11.597	29.613	1.00	16.48
ATOM	7975	CA	VAL	K	189	150.972	-10.880	30.091	1.00	19.71
ATOM	7976	C	VAL	K	189	152.198	-11.428	29.374	1.00	22.23
ATOM	7977	O	VAL	K	189	152.178	-12.526	28.818	1.00	20.52
ATOM	7978	CB	VAL	K	189	151.183	-11.080	31.579	1.00	18.11

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ATOM	7979	CG1	VAL	K	189	149.968	-10.705	32.326	1.00	19.27
ATOM	7980	CG2	VAL	K	189	151.496	-12.511	31.847	1.00	18.86
ATOM	7981	N	PRO	K	190	153.298	-10.678	29.407	1.00	25.23
ATOM	7982	CA	PRO	K	190	154.498	-11.139	28.738	1.00	29.56
ATOM	7983	C	PRO	K	190	154.954	-12.370	29.452	1.00	32.39
ATOM	7984	O	PRO	K	190	154.965	-12.388	30.674	1.00	28.53
ATOM	7985	CB	PRO	K	190	155.473	-9.991	28.937	1.00	29.11
ATOM	7986	CG	PRO	K	190	154.646	-8.843	29.262	1.00	26.06
ATOM	7987	CD	PRO	K	190	153.554	-9.406	30.083	1.00	25.73
ATOM	7988	N	SER	K	191	155.344	-13.382	28.686	1.00	36.89
ATOM	7989	CA	SER	K	191	155.800	-14.636	29.254	1.00	38.26
ATOM	7990	C	SER	K	191	156.944	-14.375	30.187	1.00	40.16
ATOM	7991	O	SER	K	191	156.903	-14.765	31.346	1.00	40.03
ATOM	7992	CB	SER	K	191	156.258	-15.576	28.155	1.00	37.23
ATOM	7993	OG	SER	K	191	155.548	-16.790	28.242	1.00	39.16
ATOM	7994	N	SER	K	192	157.960	-13.692	29.671	1.00	42.19
ATOM	7995	CA	SER	K	192	159.146	-13.368	30.445	1.00	43.15
ATOM	7996	C	SER	K	192	158.808	-12.778	31.813	1.00	45.78
ATOM	7997	O	SER	K	192	159.657	-12.693	32.698	1.00	45.59
ATOM	7998	CB	SER	K	192	159.986	-12.378	29.657	1.00	42.37
ATOM	7999	OG	SER	K	192	159.850	-11.082	30.192	1.00	43.17
ATOM	8000	N	SER	K	193	157.558	-12.363	31.985	1.00	48.11
ATOM	8001	CA	SER	K	193	157.132	-11.771	33.246	1.00	48.47
ATOM	8002	C	SER	K	193	156.872	-12.769	34.363	1.00	44.59
ATOM	8003	O	SER	K	193	157.322	-12.578	35.482	1.00	43.56
ATOM	8004	CB	SER	K	193	155.873	-10.930	33.026	1.00	54.58
ATOM	8005	OG	SER	K	193	154.711	-11.741	33.030	1.00	56.85
ATOM	8006	N	LEU	K	194	156.148	-13.831	34.052	1.00	43.77
ATOM	8007	CA	LEU	K	194	155.811	-14.852	35.032	1.00	44.90
ATOM	8008	C	LEU	K	194	156.824	-15.053	36.132	1.00	48.45
ATOM	8009	O	LEU	K	194	156.478	-15.569	37.179	1.00	52.65
ATOM	8010	CB	LEU	K	194	155.582	-16.189	34.351	1.00	40.86
ATOM	8011	CG	LEU	K	194	154.493	-16.102	33.297	1.00	41.19
ATOM	8012	CD1	LEU	K	194	155.002	-16.738	32.043	1.00	43.60
ATOM	8013	CD2	LEU	K	194	153.239	-16.781	33.766	1.00	38.12
ATOM	8014	N	GLY	K	195	158.080	-14.695	35.898	1.00	53.29
ATOM	8015	CA	GLY	K	195	159.086	-14.860	36.942	1.00	55.58
ATOM	8016	C	GLY	K	195	159.194	-13.718	37.943	1.00	54.98
ATOM	8017	O	GLY	K	195	159.037	-13.900	39.145	1.00	54.72
ATOM	8018	N	THR	K	196	159.466	-12.526	37.444	1.00	55.71
ATOM	8019	CA	THR	K	196	159.598	-11.363	38.304	1.00	57.93
ATOM	8020	C	THR	K	196	158.249	-10.805	38.757	1.00	60.14
ATOM	8021	O	THR	K	196	158.174	-10.087	39.761	1.00	62.84
ATOM	8022	CB	THR	K	196	160.352	-10.229	37.565	1.00	57.98
ATOM	8023	OG1	THR	K	196	159.416	-9.246	37.081	1.00	55.64
ATOM	8024	CG2	THR	K	196	161.126	-10.806	36.389	1.00	59.47
ATOM	8025	N	GLN	K	197	157.190	-11.130	38.020	1.00	60.15
ATOM	8026	CA	GLN	K	197	155.863	-10.593	38.320	1.00	58.82
ATOM	8027	C	GLN	K	197	154.870	-11.579	38.884	1.00	55.33
ATOM	8028	O	GLN	K	197	154.856	-12.741	38.507	1.00	54.36
ATOM	8029	CB	GLN	K	197	155.255	-9.970	37.058	1.00	61.87
ATOM	8030	CG	GLN	K	197	155.165	-8.462	37.082	1.00	64.84
ATOM	8031	CD	GLN	K	197	154.153	-7.960	38.089	1.00	66.87
ATOM	8032	OE1	GLN	K	197	153.909	-8.598	39.118	1.00	63.94
ATOM	8033	NE2	GLN	K	197	153.550	-6.807	37.797	1.00	68.99
ATOM	8034	N	THR	K	198	154.033	-11.091	39.793	1.00	54.25
ATOM	8035	CA	THR	K	198	152.988	-11.903	40.416	1.00	52.75
ATOM	8036	C	THR	K	198	151.623	-11.392	39.970	1.00	51.20
ATOM	8037	O	THR	K	198	151.477	-10.223	39.590	1.00	52.25
ATOM	8038	CB	THR	K	198	153.014	-11.805	41.942	1.00	51.36

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ATOM	8039	OG1	THR	K	198	151.922	-12.559	42.482	1.00	47.91
ATOM	8040	CG2	THR	K	198	152.884	-10.353	42.370	1.00	50.25
ATOM	8041	N	TYR	K	199	150.622	-12.261	40.035	1.00	46.04
ATOM	8042	CA	TYR	K	199	149.286	-11.873	39.627	1.00	40.09
ATOM	8043	C	TYR	K	199	148.224	-12.448	40.541	1.00	39.91
ATOM	8044	O	TYR	K	199	148.277	-13.628	40.929	1.00	39.65
ATOM	8045	CB	TYR	K	199	149.009	-12.347	38.204	1.00	35.13
ATOM	8046	CG	TYR	K	199	149.974	-11.824	37.190	1.00	29.72
ATOM	8047	CD1	TYR	K	199	150.068	-10.456	36.930	1.00	29.20
ATOM	8048	CD2	TYR	K	199	150.781	-12.692	36.472	1.00	27.01
ATOM	8049	CE1	TYR	K	199	150.944	-9.968	35.969	1.00	30.84
ATOM	8050	CE2	TYR	K	199	151.664	-12.217	35.506	1.00	27.97
ATOM	8051	CZ	TYR	K	199	151.740	-10.857	35.255	1.00	29.92
ATOM	8052	OH	TYR	K	199	152.593	-10.382	34.273	1.00	31.25
ATOM	8053	N	ILE	K	200	147.253	-11.612	40.887	1.00	37.44
ATOM	8054	CA	ILE	K	200	146.157	-12.078	41.709	1.00	36.69
ATOM	8055	C	ILE	K	200	144.867	-11.534	41.149	1.00	36.63
ATOM	8056	O	ILE	K	200	144.817	-10.359	40.739	1.00	34.92
ATOM	8057	CB	ILE	K	200	146.261	-11.619	43.148	1.00	36.15
ATOM	8058	CG1	ILE	K	200	147.677	-11.131	43.431	1.00	34.14
ATOM	8059	CG2	ILE	K	200	145.825	-12.774	44.070	1.00	36.57
ATOM	8060	CD1	ILE	K	200	148.636	-12.230	43.815	1.00	35.41
ATOM	8061	N	CYS	K	201	143.843	-12.398	41.095	1.00	33.50
ATOM	8062	CA	CYS	K	201	142.533	-11.974	40.615	1.00	28.97
ATOM	8063	C	CYS	K	201	141.703	-11.763	41.878	1.00	30.57
ATOM	8064	O	CYS	K	201	141.916	-12.430	42.914	1.00	27.90
ATOM	8065	CB	CYS	K	201	141.894	-13.001	39.653	1.00	20.39
ATOM	8066	SG	CYS	K	201	141.365	-14.572	40.402	1.00	24.24
ATOM	8067	N	ASN	K	202	140.787	-10.801	41.798	1.00	30.38
ATOM	8068	CA	ASN	K	202	139.959	-10.464	42.934	1.00	32.95
ATOM	8069	C	ASN	K	202	138.485	-10.637	42.643	1.00	34.14
ATOM	8070	O	ASN	K	202	137.813	-9.711	42.236	1.00	38.45
ATOM	8071	CB	ASN	K	202	140.245	-9.036	43.364	1.00	32.91
ATOM	8072	CG	ASN	K	202	141.646	-8.606	43.027	1.00	36.07
ATOM	8073	OD1	ASN	K	202	141.841	-7.717	42.199	1.00	37.36
ATOM	8074	ND2	ASN	K	202	142.641	-9.233	43.666	1.00	35.74
ATOM	8075	N	VAL	K	203	137.968	-11.830	42.850	1.00	35.31
ATOM	8076	CA	VAL	K	203	136.562	-12.033	42.600	1.00	37.83
ATOM	8077	C	VAL	K	203	135.815	-11.469	43.782	1.00	43.45
ATOM	8078	O	VAL	K	203	136.205	-11.669	44.938	1.00	45.32
ATOM	8079	CB	VAL	K	203	136.215	-13.534	42.485	1.00	38.26
ATOM	8080	CG1	VAL	K	203	134.915	-13.866	43.231	1.00	33.53
ATOM	8081	CG2	VAL	K	203	136.082	-13.906	41.048	1.00	35.96
ATOM	8082	N	ASN	K	204	134.737	-10.759	43.492	1.00	49.37
ATOM	8083	CA	ASN	K	204	133.896	-10.215	44.542	1.00	54.02
ATOM						133.418	-10.461	44.228	1.00	53.02

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ATOM	8099	NE2	HIS	K	205	126.846	-14.515	44.016	1.00	43.13
ATOM	8100	N	LYS	K	206	129.249	-9.707	45.872	1.00	54.51
ATOM	8101	CA	LYS	K	206	128.425	-8.957	46.832	1.00	54.34
ATOM	8102	C	LYS	K	206	127.146	-9.657	47.281	1.00	53.87
ATOM	8103	O	LYS	K	206	126.885	-9.796	48.483	1.00	54.78
ATOM	8104	CB	LYS	K	206	128.100	-7.583	46.261	1.00	54.10
ATOM	8105	CG	LYS	K	206	129.353	-6.742	46.033	1.00	60.38
ATOM	8106	CD	LYS	K	206	129.117	-5.261	46.317	1.00	62.01
ATOM	8107	CE	LYS	K	206	130.274	-4.396	45.852	1.00	63.98
ATOM	8108	NZ	LYS	K	206	130.606	-4.625	44.410	1.00	68.50
ATOM	8109	N	PRO	K	207	126.320	-10.088	46.320	1.00	50.04
ATOM	8110	CA	PRO	K	207	125.070	-10.790	46.604	1.00	44.50
ATOM	8111	C	PRO	K	207	125.246	-11.947	47.562	1.00	42.38
ATOM	8112	O	PRO	K	207	124.304	-12.661	47.820	1.00	41.63
ATOM	8113	CB	PRO	K	207	124.622	-11.278	45.239	1.00	46.42
ATOM	8114	CG	PRO	K	207	125.162	-10.272	44.297	1.00	47.51
ATOM	8115	CD	PRO	K	207	126.503	-9.879	44.874	1.00	50.18
ATOM	8116	N	SER	K	208	126.454	-12.151	48.062	1.00	45.08
ATOM	8117	CA	SER	K	208	126.724	-13.208	49.018	1.00	51.96
ATOM	8118	C	SER	K	208	127.848	-12.780	49.954	1.00	56.13
ATOM	8119	O	SER	K	208	128.344	-13.575	50.765	1.00	58.36
ATOM	8120	CB	SER	K	208	127.102	-14.505	48.299	1.00	54.27
ATOM	8121	OG	SER	K	208	128.189	-14.326	47.415	1.00	51.35
ATOM	8122	N	ASN	K	209	128.236	-11.514	49.847	1.00	57.13
ATOM	8123	CA	ASN	K	209	129.294	-10.977	50.674	1.00	61.67
ATOM	8124	C	ASN	K	209	130.599	-11.609	50.242	1.00	62.07
ATOM	8125	O	ASN	K	209	131.659	-11.226	50.717	1.00	64.54
ATOM	8126	CB	ASN	K	209	129.003	-11.309	52.143	1.00	68.45
ATOM	8127	CG	ASN	K	209	130.264	-11.424	52.997	1.00	72.93
ATOM	8128	OD1	ASN	K	209	131.019	-10.458	53.124	1.00	75.80
ATOM	8129	ND2	ASN	K	209	130.483	-12.602	53.604	1.00	72.18
ATOM	8130	N	THR	K	210	130.518	-12.588	49.347	1.00	61.57
ATOM	8131	CA	THR	K	210	131.697	-13.288	48.850	1.00	63.55
ATOM	8132	C	THR	K	210	132.818	-12.408	48.273	1.00	63.32
ATOM	8133	O	THR	K	210	132.572	-11.361	47.675	1.00	61.73
ATOM	8134	CB	THR	K	210	131.297	-14.320	47.786	1.00	64.07
ATOM	8135	OG1	THR	K	210	130.613	-15.404	48.421	1.00	69.98
ATOM	8136	CG2	THR	K	210	132.520	-14.879	47.101	1.00	66.93
ATOM	8137	N	LYS	K	211	134.058	-12.845	48.486	1.00	62.10
ATOM	8138	CA	LYS	K	211	135.233	-12.158	47.977	1.00	59.81
ATOM	8139	C	LYS	K	211	136.440	-13.104	48.113	1.00	57.59
ATOM	8140	O	LYS	K	211	136.710	-13.680	49.177	1.00	58.02
ATOM	8141	CB	LYS	K	211	135.475	-10.862	48.740	1.00	63.40
ATOM	8142	CG	LYS	K	211	136.939	-10.646	49.070	1.00	71.64
ATOM	8143	CD	LYS	K	211	137.589	-9.637	48.144	1.00	75.28
ATOM	8144	CE	LYS	K	211	138.945	-9.192	48.704	1.00	79.56
ATOM	8145	NZ	LYS	K	211	139.669	-8.253	47.789	1.00	83.97
ATOM	8146	N	VAL	K	212	137.159	-13.262	47.012	1.00	54.45
ATOM	8147	CA	VAL	K	212	138.312	-14.141	46.962	1.00	50.51
ATOM	8148	C	VAL	K	212	139.441	-13.468	46.185	1.00	51.64
ATOM	8149	O	VAL	K	212	139.202	-12.631	45.309	1.00	52.37
ATOM	8150	CB	VAL	K	212	137.941	-15.485	46.271	1.00	45.90
ATOM	8151	CG1	VAL	K	212	139.155	-16.373	46.142	1.00	42.24
ATOM	8152	CG2	VAL	K	212	136.890	-16.204	47.086	1.00	44.78
ATOM	8153	N	ASP	K	213	140.673	-13.828	46.527	1.00	51.04
ATOM	8154	CA	ASP	K	213	141.845	-13.302	45.846	1.00	47.15
ATOM	8155	C	ASP	K	213	142.731	-14.498	45.441	1.00	44.54
ATOM	8156	O	ASP	K	213	143.572	-14.982	46.214	1.00	44.32
ATOM	8157	CB	ASP	K	213	142.585	-12.339	46.772	1.00	49.17
ATOM	8158	CG	ASP	K	213	141.776	-11.099	47.088	1.00	50.96

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ATOM	8159	OD1	ASP	K	213	141.134	-10.537	46.160	1.00	50.25
ATOM	8160	OD2	ASP	K	213	141.795	-10.695	48.274	1.00	53.25
ATOM	8161	N	LYS	K	214	142.498	-15.004	44.231	1.00	40.96
ATOM	8162	CA	LYS	K	214	143.267	-16.131	43.715	1.00	36.53
ATOM	8163	C	LYS	K	214	144.592	-15.615	43.131	1.00	37.42
ATOM	8164	O	LYS	K	214	144.596	-14.778	42.219	1.00	34.66
ATOM	8165	CB	LYS	K	214	142.475	-16.869	42.636	0.00	33.92
ATOM	8166	CG	LYS	K	214	142.633	-18.376	42.686	0.00	29.45
ATOM	8167	CD	LYS	K	214	143.875	-18.825	41.936	0.00	26.22
ATOM	8168	CE	LYS	K	214	144.867	-19.500	42.867	0.00	24.17
ATOM	8169	NZ	LYS	K	214	144.289	-20.712	43.510	0.00	22.47
ATOM	8170	N	LYS	K	215	145.711	-16.083	43.695	1.00	35.45
ATOM	8171	CA	LYS	K	215	147.034	-15.710	43.209	1.00	29.72
ATOM	8172	C	LYS	K	215	147.254	-16.723	42.103	1.00	30.13
ATOM	8173	O	LYS	K	215	147.450	-17.911	42.383	1.00	29.38
ATOM	8174	CB	LYS	K	215	148.090	-15.908	44.302	0.00	27.79
ATOM	8175	CG	LYS	K	215	149.524	-15.708	43.830	0.00	23.68
ATOM	8176	CD	LYS	K	215	150.446	-15.363	44.991	0.00	20.52
ATOM	8177	CE	LYS	K	215	151.073	-16.613	45.588	0.00	18.40
ATOM	8178	NZ	LYS	K	215	151.713	-16.340	46.905	0.00	16.55
ATOM	8179	N	VAL	K	216	147.170	-16.282	40.851	1.00	29.79
ATOM	8180	CA	VAL	K	216	147.378	-17.210	39.746	1.00	30.67
ATOM	8181	C	VAL	K	216	148.872	-17.396	39.606	1.00	35.17
ATOM	8182	O	VAL	K	216	149.623	-16.427	39.484	1.00	41.25
ATOM	8183	CB	VAL	K	216	146.855	-16.682	38.422	1.00	26.43
ATOM	8184	CG1	VAL	K	216	146.736	-17.844	37.444	1.00	24.27
ATOM	8185	CG2	VAL	K	216	145.537	-15.989	38.618	1.00	25.66
ATOM	8186	N	GLU	K	217	149.314	-18.639	39.665	1.00	36.49
ATOM	8187	CA	GLU	K	217	150.726	-18.915	39.564	1.00	39.83
ATOM	8188	C	GLU	K	217	150.878	-19.904	38.467	1.00	40.38
ATOM	8189	O	GLU	K	217	150.010	-20.747	38.287	1.00	42.09
ATOM	8190	CB	GLU	K	217	151.222	-19.507	40.867	1.00	45.25
ATOM	8191	CG	GLU	K	217	150.920	-18.632	42.058	1.00	50.68
ATOM	8192	CD	GLU	K	217	151.420	-19.233	43.354	1.00	55.33
ATOM	8193	OE1	GLU	K	217	150.604	-19.849	44.087	1.00	55.51
ATOM	8194	OE2	GLU	K	217	152.632	-19.084	43.630	1.00	57.09
ATOM	8195	N	PRO	K	218	151.991	-19.837	37.736	1.00	37.80
ATOM	8196	CA	PRO	K	218	152.260	-20.742	36.622	1.00	37.69
ATOM	8197	C	PRO	K	218	152.528	-22.161	37.035	1.00	37.63
ATOM	8198	O	PRO	K	218	153.669	-22.569	37.120	1.00	41.56
ATOM	8199	CB	PRO	K	218	153.469	-20.124	35.954	1.00	37.53
ATOM	8200	CG	PRO	K	218	154.195	-19.499	37.113	1.00	38.01
ATOM	8201	CD	PRO	K	218	153.098	-18.900	37.953	1.00	35.77
ATOM	8202	N	LYS	K	219	151.470	-22.907	37.307	1.00	39.82
ATOM	8203	CA	LYS	K	219	151.603	-24.309	37.666	1.00	39.98
ATOM	8204	C	LYS	K	219	151.831	-25.007	36.332	1.00	43.18
ATOM	8205	O	LYS	K	219	152.901	-24.762	35.740	1.00	43.66
ATOM	8206	CB	LYS	K	219	150.312	-24.820	38.300	0.00	36.29
ATOM	8207	CG	LYS	K	219	150.427	-25.143	39.779	0.00	31.33
ATOM	8208	CD	LYS	K	219	149.745	-26.461	40.111	0.00	27.25
ATOM	8209	CE	LYS	K	219	148.337	-26.240	40.644	0.00	24.66
ATOM	8210	NZ	LYS	K	219	147.321	-26.249	39.556	0.00	22.54
ATOM	8211	OT	LYS	K	219	150.931	-25.759	35.882	1.00	46.37
ATOM	8212	N	ASP	M	1	100.603	-11.916	13.643	1.00	33.51
ATOM	8213	CA	ASP	M	1	101.515	-10.789	13.996	1.00	30.05
ATOM	8214	C	ASP	M	1	102.418	-10.443	12.831	1.00	27.09
ATOM	8215	O	ASP	M	1	102.789	-11.328	12.060	1.00	32.76
ATOM	8216	CB	ASP	M	1	102.363	-11.171	15.205	1.00	29.96
ATOM	8217	CG	ASP	M	1	101.538	-11.263	16.484	1.00	32.61
ATOM	8218	OD1	ASP	M	1	100.271	-11.292	16.372	1.00	31.32

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ATOM	8219	OD2	ASP	M	1	102.161	-11.301	17.586	1.00	30.12
ATOM	8220	N	ILE	M	2	102.756	-9.164	12.688	1.00	20.86
ATOM	8221	CA	ILE	M	2	103.636	-8.754	11.617	1.00	11.44
ATOM	8222	C	ILE	M	2	105.044	-9.133	12.028	1.00	10.88
ATOM	8223	O	ILE	M	2	105.394	-9.053	13.215	1.00	7.19
ATOM	8224	CB	ILE	M	2	103.613	-7.273	11.421	1.00	8.21
ATOM	8225	CG1	ILE	M	2	102.185	-6.770	11.365	1.00	2.00
ATOM	8226	CG2	ILE	M	2	104.280	-6.967	10.121	1.00	20.86
ATOM	8227	CD1	ILE	M	2	101.984	-5.645	10.438	1.00	2.00
ATOM	8228	N	VAL	M	3	105.848	-9.564	11.056	1.00	11.70
ATOM	8229	CA	VAL	M	3	107.236	-9.944	11.327	1.00	11.40
ATOM	8230	C	VAL	M	3	108.226	-9.098	10.547	1.00	13.15
ATOM	8231	O	VAL	M	3	108.196	-9.041	9.309	1.00	15.60
ATOM	8232	CB	VAL	M	3	107.516	-11.390	11.017	1.00	4.68
ATOM	8233	CG1	VAL	M	3	108.798	-11.742	11.629	1.00	2.00
ATOM	8234	CG2	VAL	M	3	106.444	-12.272	11.595	1.00	8.10
ATOM	8235	N	LEU	M	4	109.089	-8.415	11.293	1.00	13.44
ATOM	8236	CA	LEU	M	4	110.082	-7.537	10.690	1.00	12.75
ATOM	8237	C	LEU	M	4	111.414	-8.249	10.634	1.00	11.68
ATOM	8238	O	LEU	M	4	111.863	-8.823	11.616	1.00	13.03
ATOM	8239	CB	LEU	M	4	110.201	-6.245	11.506	1.00	9.28
ATOM	8240	CG	LEU	M	4	108.852	-5.521	11.674	1.00	8.93
ATOM	8241	CD1	LEU	M	4	109.057	-4.139	12.427	1.00	2.00
ATOM	8242	CD2	LEU	M	4	108.178	-5.374	10.251	1.00	2.00
ATOM	8243	N	THR	M	5	112.056	-8.215	9.483	1.00	10.66
ATOM	8244	CA	THR	M	5	113.334	-8.872	9.380	1.00	9.04
ATOM	8245	C	THR	M	5	114.332	-7.806	9.028	1.00	11.40
ATOM	8246	O	THR	M	5	114.189	-7.131	8.018	1.00	16.23
ATOM	8247	CB	THR	M	5	113.279	-9.859	8.311	1.00	10.57
ATOM	8248	OG1	THR	M	5	112.556	-11.000	8.789	1.00	14.08
ATOM	8249	CG2	THR	M	5	114.659	-10.205	7.886	1.00	13.15
ATOM	8250	N	GLN	M	6	115.335	-7.609	9.866	1.00	10.24
ATOM	8251	CA	GLN	M	6	116.303	-6.557	9.558	1.00	9.75
ATOM	8252	C	GLN	M	6	117.470	-7.147	8.753	1.00	6.88
ATOM	8253	O	GLN	M	6	117.523	-8.330	8.506	1.00	2.86
ATOM	8254	CB	GLN	M	6	116.836	-5.919	10.845	1.00	7.11
ATOM	8255	CG	GLN	M	6	115.824	-5.571	11.879	1.00	2.00
ATOM	8256	CD	GLN	M	6	116.396	-4.659	12.941	1.00	4.98
ATOM	8257	OE1	GLN	M	6	115.788	-4.446	13.976	1.00	9.53
ATOM	8258	NE2	GLN	M	6	117.565	-4.093	12.682	1.00	12.84
ATOM	8259	N	SER	M	7	118.421	-6.319	8.366	1.00	7.52
ATOM	8260	CA	SER	M	7	119.539	-6.815	7.592	1.00	8.57
ATOM	8261	C	SER	M	7	120.419	-5.659	7.198	1.00	9.15
ATOM	8262	O	SER	M	7	119.933	-4.576	6.904	1.00	15.03
ATOM	8263	CB	SER	M	7	119.057	-7.492	6.322	1.00	5.95
ATOM	8264	OG	SER	M	7	119.860	-7.070	5.240	1.00	11.30
ATOM	8265	N	PRO	M	8	121.730	-5.851	7.258	1.00	8.07
ATOM	8266	CA	PRO	M	8	122.390	-7.083	7.676	1.00	4.94
ATOM	8267	C	PRO	M	8	122.194	-7.208	9.176	1.00	3.72
ATOM	8268	O	PRO	M	8	121.862	-6.225	9.854	1.00	2.00
ATOM	8269	CB	PRO	M	8	123.851	-6.793	7.408	1.00	11.59
ATOM	8270	CG	PRO	M	8	123.978	-5.263	7.741	1.00	5.85
ATOM	8271	CD	PRO	M	8	122.703	-4.771	7.006	1.00	11.43
ATOM	8272	N	ALA	M	9	122.500	-8.381	9.712	1.00	2.00
ATOM	8273	CA	ALA	M	9	122.362	-8.553	11.152	1.00	2.51
ATOM	8274	C	ALA	M	9	123.513	-7.790	11.762	1.00	7.82
ATOM	8275	O	ALA	M	9	123.369	-7.184	12.823	1.00	9.45
ATOM	8276	CB	ALA	M	9	122.439	-9.982	11.541	1.00	2.00
ATOM	8277	N	THR	M	10	124.671	-7.833	11.095	1.00	10.85
ATOM	8278	CA	THR	M	10	125.808	-7.070	11.569	1.00	5.94



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ATOM	8279	C	THR	M	10	126.260	-6.202	10.431	1.00	7.00
ATOM	8280	O	THR	M	10	126.338	-6.664	9.308	1.00	8.25
ATOM	8281	CB	THR	M	10	127.005	-7.850	11.892	1.00	4.83
ATOM	8282	OG1	THR	M	10	126.732	-8.862	12.880	1.00	6.92
ATOM	8283	CG2	THR	M	10	128.002	-6.854	12.412	1.00	5.91
ATOM	8284	N	LEU	M	11	126.494	-4.927	10.701	1.00	7.43
ATOM	8285	CA	LEU	M	11	126.959	-4.011	9.673	1.00	3.43
ATOM	8286	C	LEU	M	11	128.187	-3.432	10.311	1.00	5.26
ATOM	8287	O	LEU	M	11	128.103	-2.696	11.306	1.00	2.00
ATOM	8288	CB	LEU	M	11	125.929	-2.931	9.440	1.00	2.00
ATOM	8289	CG	LEU	M	11	126.065	-1.884	8.343	1.00	4.25
ATOM	8290	CD1	LEU	M	11	127.405	-1.139	8.525	1.00	8.66
ATOM	8291	CD2	LEU	M	11	125.868	-2.553	6.963	1.00	2.00
ATOM	8292	N	SER	M	12	129.338	-3.768	9.735	1.00	8.72
ATOM	8293	CA	SER	M	12	130.607	-3.291	10.275	1.00	6.49
ATOM	8294	C	SER	M	12	130.972	-2.147	9.390	1.00	5.00
ATOM	8295	O	SER	M	12	131.083	-2.298	8.188	1.00	2.96
ATOM	8296	CB	SER	M	12	131.654	-4.365	10.208	1.00	4.48
ATOM	8297	OG	SER	M	12	131.095	-5.545	10.745	1.00	17.82
ATOM	8298	N	VAL	M	13	131.077	-0.984	10.001	1.00	3.09
ATOM	8299	CA	VAL	M	13	131.376	0.242	9.309	1.00	4.19
ATOM	8300	C	VAL	M	13	132.470	0.893	10.155	1.00	7.65
ATOM	8301	O	VAL	M	13	132.694	0.464	11.309	1.00	2.00
ATOM	8302	CB	VAL	M	13	130.084	1.124	9.273	1.00	4.47
ATOM	8303	CG1	VAL	M	13	130.012	2.019	10.505	1.00	2.00
ATOM	8304	CG2	VAL	M	13	130.059	1.995	8.046	1.00	9.79
ATOM	8305	N	SER	M	14	133.164	1.884	9.581	1.00	8.33
ATOM	8306	CA	SER	M	14	134.226	2.610	10.295	1.00	10.80
ATOM	8307	C	SER	M	14	133.715	3.979	10.475	1.00	10.63
ATOM	8308	O	SER	M	14	132.930	4.440	9.631	1.00	12.13
ATOM	8309	CB	SER	M	14	135.468	2.735	9.456	1.00	17.20
ATOM	8310	OG	SER	M	14	135.115	3.133	8.135	1.00	30.11
ATOM	8311	N	PRO	M	15	134.217	4.696	11.514	1.00	9.32
ATOM	8312	CA	PRO	M	15	133.723	6.066	11.740	1.00	3.81
ATOM	8313	C	PRO	M	15	133.982	6.741	10.440	1.00	3.47
ATOM	8314	O	PRO	M	15	134.839	6.295	9.720	1.00	7.20
ATOM	8315	CB	PRO	M	15	134.573	6.582	12.885	1.00	2.00
ATOM	8316	CG	PRO	M	15	135.134	5.374	13.534	1.00	2.00
ATOM	8317	CD	PRO	M	15	135.287	4.339	12.459	1.00	2.08
ATOM	8318	N	GLY	M	16	133.199	7.738	10.083	1.00	4.37
ATOM	8319	CA	GLY	M	16	133.417	8.402	8.814	1.00	9.14
ATOM	8320	C	GLY	M	16	132.776	7.595	7.699	1.00	11.98
ATOM	8321	O	GLY	M	16	132.624	8.113	6.584	1.00	14.77
ATOM	8322	N	GLU	M	17	132.402	6.338	7.991	1.00	12.27
ATOM	8323	CA	GLU	M	17	131.735	5.482	6.988	1.00	18.76
ATOM	8324	C	GLU	M	17	130.202	5.694	7.046	1.00	21.25
ATOM	8325	O	GLU	M	17	129.613	5.932	8.120	1.00	24.48
ATOM	8326	CB	GLU	M	17	132.053	3.973	7.174	1.00	14.15
ATOM	8327	CG	GLU	M	17	131.960	3.159	5.849	1.00	21.95
ATOM	8328	CD	GLU	M	17	132.484	1.683	5.927	1.00	29.88
ATOM	8329	OE1	GLU	M	17	132.996	1.273	7.010	1.00	27.12
ATOM	8330	OE2	GLU	M	17	132.374	0.938	4.895	1.00	20.17
ATOM	8331	N	ARG	M	18	129.543	5.671	5.894	1.00	19.04
ATOM	8332	CA	ARG	M	18	128.107	5.838	5.918	1.00	14.96
ATOM	8333	C	ARG	M	18	127.541	4.439	6.022	1.00	14.90
ATOM	8334	O	ARG	M	18	128.002	3.528	5.359	1.00	14.20
ATOM	8335	CB	ARG	M	18	127.602	6.549	4.662	1.00	15.07
ATOM	8336	CG	ARG	M	18	126.228	6.136	4.218	1.00	18.97
ATOM	8337	CD	ARG	M	18	126.017	6.505	2.772	1.00	28.84
ATOM	8338	NE	ARG	M	18	124.757	7.211	2.531	1.00	38.58

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ATOM	8339	CZ	ARG	M	18	124.105	7.186	1.370	1.00	43.40
ATOM	8340	NH1	ARG	M	18	124.612	6.484	0.354	1.00	47.13
ATOM	8341	NH2	ARG	M	18	122.946	7.837	1.227	1.00	41.88
ATOM	8342	N	ALA	M	19	126.535	4.284	6.871	1.00	18.34
ATOM	8343	CA	ALA	M	19	125.886	3.003	7.092	1.00	14.83
ATOM	8344	C	ALA	M	19	124.377	3.140	6.929	1.00	12.81
ATOM	8345	O	ALA	M	19	123.773	4.143	7.320	1.00	13.01
ATOM	8346	CB	ALA	M	19	126.203	2.483	8.483	1.00	10.19
ATOM	8347	N	THR	M	20	123.775	2.149	6.293	1.00	9.18
ATOM	8348	CA	THR	M	20	122.339	2.148	6.154	1.00	7.01
ATOM	8349	C	THR	M	20	121.794	0.726	6.369	1.00	8.77
ATOM	8350	O	THR	M	20	122.139	-0.221	5.665	1.00	11.20
ATOM	8351	CB	THR	M	20	121.929	2.707	4.808	1.00	2.46
ATOM	8352	OG1	THR	M	20	121.378	1.665	4.006	1.00	6.02
ATOM	8353	CG2	THR	M	20	123.109	3.318	4.134	1.00	8.06
ATOM	8354	N	ILE	M	21	120.946	0.595	7.381	1.00	12.82
ATOM	8355	CA	ILE	M	21	120.320	-0.671	7.733	1.00	12.63
ATOM	8356	C	ILE	M	21	118.971	-0.749	7.033	1.00	12.09
ATOM	8357	O	ILE	M	21	118.417	0.264	6.604	1.00	18.47
ATOM	8358	CB	ILE	M	21	120.033	-0.758	9.232	1.00	12.41
ATOM	8359	CG1	ILE	M	21	121.336	-0.735	10.012	1.00	4.05
ATOM	8360	CG2	ILE	M	21	119.146	-1.976	9.525	1.00	14.17
ATOM	8361	CD1	ILE	M	21	121.171	0.037	11.260	1.00	9.89
ATOM	8362	N	SER	M	22	118.413	-1.938	6.935	1.00	6.67
ATOM	8363	CA	SER	M	22	117.138	-2.044	6.279	1.00	12.23
ATOM	8364	C	SER	M	22	116.210	-2.935	7.107	1.00	16.62
ATOM	8365	O	SER	M	22	116.641	-3.934	7.715	1.00	17.35
ATOM	8366	CB	SER	M	22	117.310	-2.646	4.912	1.00	11.67
ATOM	8367	OG	SER	M	22	117.313	-4.050	5.080	1.00	18.43
ATOM	8368	N	CYS	M	23	114.922	-2.598	7.090	1.00	15.49
ATOM	8369	CA	CYS	M	23	113.950	-3.346	7.855	1.00	13.37
ATOM	8370	C	CYS	M	23	112.924	-3.962	6.950	1.00	13.53
ATOM	8371	O	CYS	M	23	112.744	-3.498	5.813	1.00	14.32
ATOM	8372	CB	CYS	M	23	113.232	-2.444	8.833	1.00	12.83
ATOM	8373	SG	CYS	M	23	112.161	-3.480	9.837	1.00	2.00
ATOM	8374	N	ARG	M	24	112.190	-4.953	7.459	1.00	11.58
ATOM	8375	CA	ARG	M	24	111.218	-5.620	6.600	1.00	15.62
ATOM	8376	C	ARG	M	24	109.910	-6.166	7.162	1.00	20.35
ATOM	8377	O	ARG	M	24	109.890	-7.108	7.963	1.00	21.64
ATOM	8378	CB	ARG	M	24	111.918	-6.717	5.908	1.00	11.77
ATOM	8379	CG	ARG	M	24	112.079	-6.459	4.507	1.00	15.25
ATOM	8380	CD	ARG	M	24	111.714	-7.725	3.844	1.00	27.23
ATOM	8381	NE	ARG	M	24	111.132	-7.336	2.602	1.00	32.68
ATOM	8382	CZ	ARG	M	24	111.822	-7.231	1.484	1.00	30.57
ATOM	8383	NH1	ARG	M	24	113.131	-7.509	1.493	1.00	13.49
ATOM	8384	NH2	ARG	M	24	111.192	-6.780	0.397	1.00	30.68
ATOM	8385	N	ALA	M	25	108.804	-5.626	6.661	1.00	18.15
ATOM	8386	CA	ALA	M	25	107.512	-6.026	7.170	1.00	12.89
ATOM	8387	C	ALA	M	25	106.962	-7.197	6.415	1.00	7.84
ATOM	8388	O	ALA	M	25	107.042	-7.237	5.188	1.00	4.28
ATOM	8389	CB	ALA	M	25	106.534	-4.845	7.094	1.00	15.84
ATOM	8390	N	SER	M	26	106.393	-8.138	7.160	1.00	5.06
ATOM	8391	CA	SER	M	26	105.789	-9.304	6.559	1.00	7.71
ATOM	8392	C	SER	M	26	104.572	-8.875	5.810	1.00	12.21
ATOM	8393	O	SER	M	26	103.961	-9.704	5.140	1.00	13.68
ATOM	8394	CB	SER	M	26	105.372	-10.318	7.591	1.00	8.28
ATOM	8395	OG	SER	M	26	105.154	-9.677	8.816	1.00	11.39
ATOM	8396	N	GLN	M	27	104.233	-7.582	5.928	1.00	14.49
ATOM	8397	CA	GLN	M	27	103.106	-6.985	5.200	1.00	16.23
ATOM	8398	C	GLN	M	27	103.273	-5.473	5.123	1.00	16.47

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ATOM	8399	O	GLN	M	27	104.075	-4.902	5.880	1.00	18.39
ATOM	8400	CB	GLN	M	27	101.812	-7.279	5.897	1.00	22.49
ATOM	8401	CG	GLN	M	27	101.760	-6.692	7.295	1.00	27.12
ATOM	8402	CD	GLN	M	27	100.411	-6.940	7.920	1.00	29.55
ATOM	8403	OE1	GLN	M	27	100.172	-8.002	8.512	1.00	27.70
ATOM	8404	NE2	GLN	M	27	99.501	-5.974	7.761	1.00	32.65
ATOM	8405	N	ARG	M	28	102.556	-4.814	4.208	1.00	8.71
ATOM	8406	CA	ARG	M	28	102.687	-3.369	4.125	1.00	11.39
ATOM	8407	C	ARG	M	28	102.323	-2.757	5.501	1.00	14.38
ATOM	8408	O	ARG	M	28	101.526	-3.334	6.266	1.00	17.93
ATOM	8409	CB	ARG	M	28	101.770	-2.808	3.032	1.00	12.57
ATOM	8410	CG	ARG	M	28	102.310	-2.876	1.621	1.00	26.80
ATOM	8411	CD	ARG	M	28	101.284	-2.270	0.668	1.00	39.84
ATOM	8412	NE	ARG	M	28	101.655	-2.380	-0.752	1.00	53.32
ATOM	8413	CZ	ARG	M	28	102.280	-1.428	-1.467	1.00	57.26
ATOM	8414	NH1	ARG	M	28	102.639	-0.264	-0.907	1.00	55.36
ATOM	8415	NH2	ARG	M	28	102.544	-1.635	-2.764	1.00	56.56
ATOM	8416	N	VAL	M	29	102.935	-1.631	5.856	1.00	6.92
ATOM	8417	CA	VAL	M	29	102.594	-1.006	7.098	1.00	2.00
ATOM	8418	C	VAL	M	29	102.702	0.463	6.813	1.00	6.17
ATOM	8419	O	VAL	M	29	102.944	1.308	7.703	1.00	11.24
ATOM	8420	CB	VAL	M	29	103.516	-1.388	8.223	1.00	2.00
ATOM	8421	CG1	VAL	M	29	103.365	-2.840	8.558	1.00	2.00
ATOM	8422	CG2	VAL	M	29	104.886	-1.090	7.853	1.00	8.21
ATOM	8423	N	SER	M	30	102.541	0.792	5.545	1.00	4.40
ATOM	8424	CA	SER	M	30	102.546	2.201	5.216	1.00	14.50
ATOM	8425	C	SER	M	30	101.238	2.456	4.475	1.00	12.90
ATOM	8426	O	SER	M	30	100.941	1.745	3.537	1.00	16.08
ATOM	8427	CB	SER	M	30	103.770	2.563	4.346	1.00	17.19
ATOM	8428	OG	SER	M	30	103.405	3.161	3.100	1.00	17.75
ATOM	8429	N	SER	M	31	100.439	3.436	4.877	1.00	8.56
ATOM	8430	CA	SER	M	31	99.200	3.662	4.136	1.00	11.30
ATOM	8431	C	SER	M	31	99.278	4.937	3.303	1.00	14.59
ATOM	8432	O	SER	M	31	100.330	5.314	2.882	1.00	23.56
ATOM	8433	CB	SER	M	31	98.001	3.710	5.083	1.00	12.68
ATOM	8434	OG	SER	M	31	98.003	4.901	5.855	1.00	26.84
ATOM	8435	N	SER	M	32	98.200	5.671	3.124	1.00	16.53
ATOM	8436	CA	SER	M	32	98.274	6.821	2.246	1.00	12.11
ATOM	8437	C	SER	M	32	98.978	8.059	2.739	1.00	12.96
ATOM	8438	O	SER	M	32	99.220	8.973	1.963	1.00	17.39
ATOM	8439	CB	SER	M	32	96.869	7.178	1.780	1.00	12.77
ATOM	8440	OG	SER	M	32	96.118	7.740	2.837	1.00	13.36
ATOM	8441	N	THR	M	33	99.307	8.156	4.005	1.00	15.10
ATOM	8442	CA	THR	M	33	100.003	9.391	4.389	1.00	20.02
ATOM	8443	C	THR	M	33	101.221	9.124	5.254	1.00	22.17
ATOM	8444	O	THR	M	33	102.185	9.901	5.254	1.00	24.12
ATOM	8445	CB	THR	M	33	99.100	10.382	5.177	1.00	17.51
ATOM	8446	OG1	THR	M	33	97.713	10.145	4.900	1.00	27.54
ATOM	8447	CG2	THR	M	33	99.461	11.775	4.833	1.00	16.23
ATOM	8448	N	TYR	M	34	101.140	8.044	6.027	1.00	19.68
ATOM	8449	CA	TYR	M	34	102.210	7.665	6.911	1.00	14.57
ATOM	8450	C	TYR	M	34	102.611	6.191	6.765	1.00	13.50
ATOM	8451	O	TYR	M	34	101.906	5.364	6.151	1.00	7.36
ATOM	8452	CB	TYR	M	34	101.812	7.978	8.357	1.00	17.62
ATOM	8453	CG	TYR	M	34	101.432	9.428	8.610	1.00	23.24
ATOM	8454	CD1	TYR	M	34	100.572	10.096	7.748	1.00	26.43
ATOM	8455	CD2	TYR	M	34	101.888	10.114	9.733	1.00	26.00
ATOM	8456	CE1	TYR	M	34	100.162	11.390	7.977	1.00	31.16
ATOM	8457	CE2	TYR	M	34	101.477	11.427	9.979	1.00	31.85
ATOM	8458	CZ	TYR	M	34	100.611	12.046	9.090	1.00	33.95

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ATOM	8459	OH	TYR	M	34	100.147	13.313	9.318	1.00	44.17
ATOM	8460	N	SER	M	35	103.809	5.895	7.262	1.00	11.19
ATOM	8461	CA	SER	M	35	104.324	4.540	7.252	1.00	10.13
ATOM	8462	C	SER	M	35	104.529	4.331	8.734	1.00	7.72
ATOM	8463	O	SER	M	35	105.158	5.146	9.420	1.00	6.14
ATOM	8464	CB	SER	M	35	105.648	4.453	6.481	1.00	13.58
ATOM	8465	OG	SER	M	35	105.557	4.952	5.142	1.00	22.78
ATOM	8466	N	TYR	M	36	103.914	3.294	9.266	1.00	8.72
ATOM	8467	CA	TYR	M	36	104.039	3.097	10.700	1.00	13.11
ATOM	8468	C	TYR	M	36	105.272	2.316	11.161	1.00	13.32
ATOM	8469	O	TYR	M	36	105.187	1.254	11.790	1.00	10.95
ATOM	8470	CB	TYR	M	36	102.687	2.553	11.253	1.00	10.29
ATOM	8471	CG	TYR	M	36	101.569	3.610	11.177	1.00	2.00
ATOM	8472	CD1	TYR	M	36	101.280	4.424	12.257	1.00	2.00
ATOM	8473	CD2	TYR	M	36	100.910	3.868	9.976	1.00	2.00
ATOM	8474	CE1	TYR	M	36	100.393	5.459	12.139	1.00	2.00
ATOM	8475	CE2	TYR	M	36	100.021	4.906	9.855	1.00	2.00
ATOM	8476	CZ	TYR	M	36	99.768	5.703	10.931	1.00	2.00
ATOM	8477	OH	TYR	M	36	98.923	6.789	10.816	1.00	5.62
ATOM	8478	N	MET	M	37	106.430	2.897	10.853	1.00	14.61
ATOM	8479	CA	MET	M	37	107.715	2.288	11.185	1.00	9.99
ATOM	8480	C	MET	M	37	108.559	3.257	11.975	1.00	8.78
ATOM	8481	O	MET	M	37	108.513	4.463	11.730	1.00	9.75
ATOM	8482	CB	MET	M	37	108.439	1.925	9.893	1.00	8.59
ATOM	8483	CG	MET	M	37	108.282	0.506	9.477	1.00	2.00
ATOM	8484	SD	MET	M	37	109.070	-0.512	10.727	1.00	6.46
ATOM	8485	CE	MET	M	37	108.928	-2.060	9.910	1.00	7.23
ATOM	8486	N	HIS	M	38	109.318	2.743	12.934	1.00	9.39
ATOM	8487	CA	HIS	M	38	110.182	3.603	13.759	1.00	9.23
ATOM	8488	C	HIS	M	38	111.457	2.869	14.061	1.00	7.53
ATOM	8489	O	HIS	M	38	111.488	1.640	14.088	1.00	5.33
ATOM	8490	CB	HIS	M	38	109.521	3.992	15.091	1.00	8.84
ATOM	8491	CG	HIS	M	38	108.030	4.126	15.013	1.00	11.99
ATOM	8492	ND1	HIS	M	38	107.415	5.280	14.575	1.00	12.50
ATOM	8493	CD2	HIS	M	38	107.041	3.221	15.213	1.00	10.65
ATOM	8494	CE1	HIS	M	38	106.110	5.077	14.502	1.00	14.44
ATOM	8495	NE2	HIS	M	38	105.860	3.835	14.875	1.00	13.87
ATOM	8496	N	TRP	M	39	112.506	3.633	14.302	1.00	7.17
ATOM	8497	CA	TRP	M	39	113.795	3.040	14.565	1.00	7.71
ATOM	8498	C	TRP	M	39	114.421	3.439	15.889	1.00	5.14
ATOM	8499	O	TRP	M	39	114.377	4.594	16.322	1.00	4.21
ATOM	8500	CB	TRP	M	39	114.757	3.438	13.464	1.00	7.42
ATOM	8501	CG	TRP	M	39	114.417	3.041	12.090	1.00	2.00
ATOM	8502	CD1	TRP	M	39	113.690	3.747	11.180	1.00	2.00
ATOM	8503	CD2	TRP	M	39	114.949	1.920	11.401	1.00	2.00
ATOM	8504	NE1	TRP	M	39	113.754	3.127	9.944	1.00	2.00
ATOM	8505	CE2	TRP	M	39	114.522	2.004	10.067	1.00	2.89
ATOM	8506	CE3	TRP	M	39	115.756	0.859	11.786	1.00	2.00
ATOM	8507	CZ2	TRP	M	39	114.886	1.049	9.116	1.00	10.88
ATOM	8508	CZ3	TRP	M	39	116.114	-0.088	10.843	1.00	7.53
ATOM	8509	CH2	TRP	M	39	115.683	0.009	9.530	1.00	11.71
ATOM	8510	N	TYR	M	40	115.074	2.489	16.509	1.00	4.66
ATOM	8511	CA	TYR	M	40	115.696	2.798	17.767	1.00	7.52
ATOM	8512	C	TYR	M	40	117.075	2.239	17.728	1.00	8.90
ATOM	8513	O	TYR	M	40	117.336	1.222	17.039	1.00	6.51
ATOM	8514	CB	TYR	M	40	114.973	2.109	18.923	1.00	14.40
ATOM	8515	CG	TYR	M	40	113.476	2.291	18.958	1.00	15.61
ATOM	8516	CD1	TYR	M	40	112.858	2.836	20.083	1.00	14.81
ATOM	8517	CD2	TYR	M	40	112.678	1.956	17.856	1.00	14.50
ATOM	8518	CE1	TYR	M	40	111.469	3.048	20.105	1.00	18.81

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ATOM	8519	CE2	TYR	M	40	111.289	2.163	17.862	1.00	17.22
ATOM	8520	CZ	TYR	M	40	110.683	2.705	18.982	1.00	18.60
ATOM	8521	OH	TYR	M	40	109.300	2.846	18.995	1.00	11.37
ATOM	8522	N	GLN	M	41	117.936	2.881	18.508	1.00	5.59
ATOM	8523	CA	GLN	M	41	119.309	2.441	18.654	1.00	6.13
ATOM	8524	C	GLN	M	41	119.386	2.049	20.114	1.00	3.93
ATOM	8525	O	GLN	M	41	118.818	2.714	20.971	1.00	2.00
ATOM	8526	CB	GLN	M	41	120.278	3.583	18.411	1.00	8.76
ATOM	8527	CG	GLN	M	41	120.682	4.276	19.701	1.00	9.43
ATOM	8528	CD	GLN	M	41	121.991	5.012	19.619	1.00	12.40
ATOM	8529	OE1	GLN	M	41	122.747	4.859	18.659	1.00	18.64
ATOM	8530	NE2	GLN	M	41	122.272	5.822	20.633	1.00	6.88
ATOM	8531	N	GLN	M	42	120.096	0.988	20.429	1.00	7.33
ATOM	8532	CA	GLN	M	42	120.175	0.630	21.828	1.00	8.26
ATOM	8533	C	GLN	M	42	121.595	0.215	22.082	1.00	10.96
ATOM	8534	O	GLN	M	42	122.167	-0.586	21.325	1.00	8.87
ATOM	8535	CB	GLN	M	42	119.242	-0.527	22.155	1.00	12.09
ATOM	8536	CG	GLN	M	42	119.695	-1.337	23.353	1.00	11.29
ATOM	8537	CD	GLN	M	42	118.661	-2.346	23.816	1.00	10.86
ATOM	8538	OE1	GLN	M	42	118.258	-3.287	23.082	1.00	7.65
ATOM	8539	NE2	GLN	M	42	118.225	-2.157	25.049	1.00	4.66
ATOM	8540	N	LYS	M	43	122.151	0.785	23.144	1.00	15.07
ATOM	8541	CA	LYS	M	43	123.505	0.501	23.566	1.00	18.06
ATOM	8542	C	LYS	M	43	123.462	-0.644	24.566	1.00	22.84
ATOM	8543	O	LYS	M	43	122.407	-0.990	25.098	1.00	23.00
ATOM	8544	CB	LYS	M	43	124.120	1.723	24.223	1.00	13.59
ATOM	8545	CG	LYS	M	43	124.074	2.952	23.365	1.00	12.50
ATOM	8546	CD	LYS	M	43	125.219	3.001	22.408	1.00	20.23
ATOM	8547	CE	LYS	M	43	125.837	4.390	22.311	1.00	25.24
ATOM	8548	NZ	LYS	M	43	124.901	5.379	21.719	1.00	32.07
ATOM	8549	N	PRO	M	44	124.613	-1.267	24.812	1.00	25.56
ATOM	8550	CA	PRO	M	44	124.631	-2.367	25.769	1.00	24.78
ATOM	8551	C	PRO	M	44	124.286	-1.764	27.118	1.00	22.14
ATOM	8552	O	PRO	M	44	124.692	-0.625	27.413	1.00	14.74
ATOM	8553	CB	PRO	M	44	126.078	-2.865	25.728	1.00	28.44
ATOM	8554	CG	PRO	M	44	126.652	-2.286	24.465	1.00	32.45
ATOM	8555	CD	PRO	M	44	125.942	-0.996	24.248	1.00	27.98
ATOM	8556	N	GLY	M	45	123.534	-2.523	27.916	1.00	20.49
ATOM	8557	CA	GLY	M	45	123.151	-2.066	29.242	1.00	25.43
ATOM	8558	C	GLY	M	45	122.035	-1.034	29.304	1.00	27.22
ATOM	8559	O	GLY	M	45	121.348	-0.885	30.305	1.00	32.30
ATOM	8560	N	GLN	M	46	121.831	-0.314	28.222	1.00	27.14
ATOM	8561	CA	GLN	M	46	120.782	0.680	28.198	1.00	25.14
ATOM	8562	C	GLN	M	46	119.523	0.253	27.409	1.00	21.92
ATOM	8563	O	GLN	M	46	119.550	-0.687	26.607	1.00	22.89
ATOM	8564	CB	GLN	M	46	121.357	1.948	27.587	1.00	33.75
ATOM	8565	CG	GLN	M	46	122.862	2.110	27.776	1.00	41.27
ATOM	8566	CD	GLN	M	46	123.277	3.576	27.935	1.00	44.14
ATOM	8567	OE1	GLN	M	46	123.196	4.375	26.988	1.00	46.74
ATOM	8568	NE2	GLN	M	46	123.711	3.936	29.142	1.00	44.86
ATOM	8569	N	PRO	M	47	118.412	0.988	27.584	1.00	19.62
ATOM	8570	CA	PRO	M	47	117.176	0.675	26.881	1.00	17.55
ATOM	8571	C	PRO	M	47	117.180	1.423	25.539	1.00	15.28
ATOM	8572	O	PRO	M	47	117.890	2.399	25.386	1.00	19.91
ATOM	8573	CB	PRO	M	47	116.115	1.223	27.814	1.00	19.39
ATOM	8574	CG	PRO	M	47	116.774	2.318	28.570	1.00	9.02
ATOM	8575	CD	PRO	M	47	118.246	2.205	28.394	1.00	17.46
ATOM	8576	N	PRO	M	48	116.350	1.010	24.574	1.00	8.67
ATOM	8577	CA	PRO	M	48	116.315	1.683	23.267	1.00	8.73
ATOM	8578	C	PRO	M	48	116.182	3.183	23.359	1.00	6.86

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ATOM	8579	O	PRO	M	48	115.719	3.647	24.375	1.00	15.29
ATOM	8580	CB	PRO	M	48	115.126	1.046	22.573	1.00	4.77
ATOM	8581	CG	PRO	M	48	115.063	-0.335	23.209	1.00	4.97
ATOM	8582	CD	PRO	M	48	115.393	-0.099	24.647	1.00	6.83
ATOM	8583	N	LYS	M	49	116.647	3.927	22.347	1.00	3.61
ATOM	8584	CA	LYS	M	49	116.543	5.397	22.294	1.00	4.64
ATOM	8585	C	LYS	M	49	115.884	5.675	20.961	1.00	6.92
ATOM	8586	O	LYS	M	49	116.335	5.192	19.919	1.00	11.52
ATOM	8587	CB	LYS	M	49	117.925	6.049	22.311	1.00	4.95
ATOM	8588	CG	LYS	M	49	117.961	7.556	22.529	1.00	12.97
ATOM	8589	CD	LYS	M	49	117.572	8.337	21.278	1.00	25.92
ATOM	8590	CE	LYS	M	49	116.637	9.583	21.586	1.00	32.21
ATOM	8591	NZ	LYS	M	49	115.141	9.294	21.508	1.00	28.32
ATOM	8592	N	LEU	M	50	114.793	6.421	20.968	1.00	7.23
ATOM	8593	CA	LEU	M	50	114.107	6.661	19.701	1.00	7.55
ATOM	8594	C	LEU	M	50	114.839	7.563	18.765	1.00	2.25
ATOM	8595	O	LEU	M	50	115.188	8.672	19.123	1.00	2.00
ATOM	8596	CB	LEU	M	50	112.690	7.237	19.914	1.00	10.30
ATOM	8597	CG	LEU	M	50	112.013	7.945	18.713	1.00	6.98
ATOM	8598	CD1	LEU	M	50	111.957	7.110	17.478	1.00	9.32
ATOM	8599	CD2	LEU	M	50	110.663	8.208	19.020	1.00	13.45
ATOM	8600	N	LEU	M	51	115.031	7.127	17.531	1.00	2.00
ATOM	8601	CA	LEU	M	51	115.716	8.011	16.607	1.00	2.04
ATOM	8602	C	LEU	M	51	114.762	8.498	15.564	1.00	2.00
ATOM	8603	O	LEU	M	51	114.642	9.689	15.293	1.00	2.00
ATOM	8604	CB	LEU	M	51	116.897	7.297	15.913	1.00	7.98
ATOM	8605	CG	LEU	M	51	118.143	7.088	16.778	1.00	7.68
ATOM	8606	CD1	LEU	M	51	118.629	5.617	16.760	1.00	2.00
ATOM	8607	CD2	LEU	M	51	119.161	8.079	16.333	1.00	7.39
ATOM	8608	N	ILE	M	52	114.069	7.579	14.941	1.00	2.00
ATOM	8609	CA	ILE	M	52	113.218	8.064	13.910	1.00	3.43
ATOM	8610	C	ILE	M	52	111.890	7.434	14.085	1.00	9.36
ATOM	8611	O	ILE	M	52	111.823	6.232	14.374	1.00	8.68
ATOM	8612	CB	ILE	M	52	113.820	7.693	12.531	1.00	10.52
ATOM	8613	CG1	ILE	M	52	115.040	8.559	12.251	1.00	10.69
ATOM	8614	CG2	ILE	M	52	112.786	7.840	11.382	1.00	11.36
ATOM	8615	CD1	ILE	M	52	116.065	7.821	11.411	1.00	12.58
ATOM	8616	N	LYS	M	53	110.846	8.253	13.862	1.00	13.17
ATOM	8617	CA	LYS	M	53	109.436	7.853	13.957	1.00	10.74
ATOM	8618	C	LYS	M	53	108.696	8.070	12.649	1.00	9.10
ATOM	8619	O	LYS	M	53	108.913	9.051	11.922	1.00	7.06
ATOM	8620	CB	LYS	M	53	108.714	8.645	15.022	1.00	11.70
ATOM	8621	CG	LYS	M	53	108.564	10.084	14.677	1.00	17.06
ATOM	8622	CD	LYS	M	53	108.943	10.911	15.892	1.00	26.13
ATOM	8623	CE	LYS	M	53	107.791	11.022	16.886	1.00	27.11
ATOM	8624	NZ	LYS	M	53	107.710	12.411	17.422	1.00	33.26
ATOM	8625	N	TYR	M	54	107.782	7.153	12.381	1.00	7.72
ATOM	8626	CA	TYR	M	54	107.003	7.187	11.155	1.00	7.77
ATOM	8627	C	TYR	M	54	107.920	7.152	9.964	1.00	7.75
ATOM	8628	O	TYR	M	54	107.876	8.043	9.130	1.00	7.75
ATOM	8629	CB	TYR	M	54	106.112	8.425	11.071	1.00	3.61
ATOM	8630	CG	TYR	M	54	105.183	8.514	12.249	1.00	10.75
ATOM	8631	CD1	TYR	M	54	105.631	9.015	13.462	1.00	12.56
ATOM	8632	CD2	TYR	M	54	103.906	7.953	12.214	1.00	11.44
ATOM	8633	CE1	TYR	M	54	104.836	8.942	14.615	1.00	13.30
ATOM	8634	CE2	TYR	M	54	103.102	7.879	13.372	1.00	2.95
ATOM	8635	CZ	TYR	M	54	103.581	8.377	14.565	1.00	2.83
ATOM	8636	OH	TYR	M	54	102.830	8.405	15.734	1.00	11.65
ATOM	8637	N	ALA	M	55	108.775	6.136	9.935	1.00	5.36
ATOM	8638	CA	ALA	M	55	109.675	5.887	8.836	1.00	10.05

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ATOM	8639	C	ALA	M	55	110.666	6.956	8.434	1.00	11.85
ATOM	8640	O	ALA	M	55	111.746	6.597	7.946	1.00	15.81
ATOM	8641	CB	ALA	M	55	108.882	5.497	7.624	1.00	14.01
ATOM	8642	N	SER	M	56	110.352	8.236	8.642	1.00	2.00
ATOM	8643	CA	SER	M	56	111.253	9.240	8.183	1.00	2.00
ATOM	8644	C	SER	M	56	111.423	10.507	8.956	1.00	2.00
ATOM	8645	O	SER	M	56	112.114	11.393	8.477	1.00	7.76
ATOM	8646	CB	SER	M	56	110.839	9.589	6.781	1.00	2.00
ATOM	8647	OG	SER	M	56	110.360	10.918	6.710	1.00	2.00
ATOM	8648	N	ASN	M	57	110.780	10.659	10.104	1.00	3.16
ATOM	8649	CA	ASN	M	57	110.989	11.896	10.833	1.00	6.27
ATOM	8650	C	ASN	M	57	111.850	11.701	12.043	1.00	6.69
ATOM	8651	O	ASN	M	57	111.631	10.782	12.847	1.00	7.05
ATOM	8652	CB	ASN	M	57	109.675	12.547	11.238	1.00	12.83
ATOM	8653	CG	ASN	M	57	108.551	12.126	10.385	1.00	19.38
ATOM	8654	OD1	ASN	M	57	108.398	12.562	9.227	1.00	17.52
ATOM	8655	ND2	ASN	M	57	107.719	11.264	10.947	1.00	32.55
ATOM	8656	N	LEU	M	58	112.853	12.568	12.159	1.00	6.95
ATOM	8657	CA	LEU	M	58	113.779	12.480	13.273	1.00	7.15
ATOM	8658	C	LEU	M	58	113.069	12.773	14.559	1.00	5.99
ATOM	8659	O	LEU	M	58	112.331	13.739	14.650	1.00	11.23
ATOM	8660	CB	LEU	M	58	114.921	13.489	13.116	1.00	8.54
ATOM	8661	CG	LEU	M	58	116.270	12.938	12.642	1.00	11.26
ATOM	8662	CD1	LEU	M	58	116.601	13.556	11.278	1.00	11.49
ATOM	8663	CD2	LEU	M	58	117.358	13.226	13.653	1.00	4.13
ATOM	8664	N	GLU	M	59	113.300	11.965	15.572	1.00	4.72
ATOM	8665	CA	GLU	M	59	112.684	12.237	16.860	1.00	6.78
ATOM	8666	C	GLU	M	59	113.320	13.536	17.361	1.00	5.42
ATOM	8667	O	GLU	M	59	114.322	13.955	16.868	1.00	9.42
ATOM	8668	CB	GLU	M	59	112.999	11.107	17.824	1.00	9.93
ATOM	8669	CG	GLU	M	59	112.755	11.457	19.238	1.00	16.11
ATOM	8670	CD	GLU	M	59	111.316	11.720	19.506	1.00	16.02
ATOM	8671	OE1	GLU	M	59	110.917	11.497	20.661	1.00	27.36
ATOM	8672	OE2	GLU	M	59	110.590	12.143	18.582	1.00	15.70
ATOM	8673	N	SER	M	60	112.774	14.200	18.338	1.00	10.44
ATOM	8674	CA	SER	M	60	113.440	15.418	18.749	1.00	19.21
ATOM	8675	C	SER	M	60	114.752	15.129	19.473	1.00	19.76
ATOM	8676	O	SER	M	60	114.803	14.288	20.380	1.00	23.78
ATOM	8677	CB	SER	M	60	112.527	16.213	19.653	1.00	28.85
ATOM	8678	OG	SER	M	60	112.692	17.597	19.428	1.00	40.92
ATOM	8679	N	GLY	M	61	115.806	15.828	19.061	1.00	20.00
ATOM	8680	CA	GLY	M	61	117.114	15.646	19.660	1.00	21.65
ATOM	8681	C	GLY	M	61	118.030	14.685	18.901	1.00	21.86
ATOM	8682	O	GLY	M	61	119.239	14.661	19.122	1.00	26.21
ATOM	8683	N	VAL	M	62	117.473	13.843	18.043	1.00	16.71
ATOM	8684	CA	VAL	M	62	118.313	12.947	17.304	1.00	12.08
ATOM	8685	C	VAL	M	62	119.087	13.834	16.386	1.00	9.64
ATOM	8686	O	VAL	M	62	118.541	14.787	15.896	1.00	6.96
ATOM	8687	CB	VAL	M	62	117.496	11.965	16.507	1.00	13.65
ATOM	8688	CG1	VAL	M	62	118.417	11.146	15.599	1.00	16.36
ATOM	8689	CG2	VAL	M	62	116.779	11.020	17.488	1.00	18.35
ATOM	8690	N	PRO	M	63	120.389	13.563	16.198	1.00	10.14
ATOM	8691	CA	PRO	M	63	121.305	14.314	15.337	1.00	7.76
ATOM	8692	C	PRO	M	63	120.995	14.116	13.865	1.00	7.53
ATOM	8693	O	PRO	M	63	120.525	13.037	13.454	1.00	9.59
ATOM	8694	CB	PRO	M	63	122.673	13.757	15.703	1.00	10.56
ATOM	8695	CG	PRO	M	63	122.448	13.041	17.035	1.00	11.74
ATOM	8696	CD	PRO	M	63	121.095	12.474	16.886	1.00	10.12
ATOM	8697	N	ALA	M	64	121.290	15.135	13.061	1.00	2.44
ATOM	8698	CA	ALA	M	64	120.963	15.059	11.660	1.00	2.28

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ATOM	8699	C	ALA	M	64	121.573	13.981	10.799	1.00	5.04
ATOM	8700	O	ALA	M	64	121.085	13.734	9.700	1.00	6.91
ATOM	8701	CB	ALA	M	64	121.170	16.331	11.058	1.00	2.00
ATOM	8702	N	ARG	M	65	122.619	13.311	11.256	1.00	8.47
ATOM	8703	CA	ARG	M	65	123.153	12.268	10.393	1.00	9.89
ATOM	8704	C	ARG	M	65	122.047	11.248	10.207	1.00	13.84
ATOM	8705	O	ARG	M	65	121.829	10.764	9.085	1.00	18.22
ATOM	8706	CB	ARG	M	65	124.378	11.546	10.974	1.00	11.25
ATOM	8707	CG	ARG	M	65	124.910	12.047	12.309	1.00	14.77
ATOM	8708	CD	ARG	M	65	126.166	11.228	12.688	1.00	14.94
ATOM	8709	NE	ARG	M	65	126.146	10.597	14.016	1.00	8.43
ATOM	8710	CZ	ARG	M	65	125.971	11.232	15.180	1.00	9.45
ATOM	8711	NH1	ARG	M	65	125.782	12.553	15.237	1.00	8.90
ATOM	8712	NH2	ARG	M	65	126.028	10.541	16.307	1.00	2.00
ATOM	8713	N	PHE	M	66	121.342	10.947	11.305	1.00	13.65
ATOM	8714	CA	PHE	M	66	120.265	9.961	11.307	1.00	9.21
ATOM	8715	C	PHE	M	66	119.147	10.340	10.429	1.00	5.41
ATOM	8716	O	PHE	M	66	118.690	11.471	10.471	1.00	3.01
ATOM	8717	CB	PHE	M	66	119.749	9.757	12.693	1.00	9.59
ATOM	8718	CG	PHE	M	66	120.728	9.109	13.566	1.00	6.78
ATOM	8719	CD1	PHE	M	66	120.929	7.744	13.458	1.00	2.00
ATOM	8720	CD2	PHE	M	66	121.443	9.864	14.516	1.00	4.56
ATOM	8721	CE1	PHE	M	66	121.798	7.125	14.265	1.00	2.00
ATOM	8722	CE2	PHE	M	66	122.336	9.255	15.345	1.00	2.00
ATOM	8723	CZ	PHE	M	66	122.517	7.869	15.224	1.00	5.64
ATOM	8724	N	SER	M	67	118.723	9.376	9.635	1.00	2.00
ATOM	8725	CA	SER	M	67	117.679	9.596	8.701	1.00	2.00
ATOM	8726	C	SER	M	67	117.042	8.251	8.355	1.00	3.90
ATOM	8727	O	SER	M	67	117.571	7.189	8.676	1.00	4.28
ATOM	8728	CB	SER	M	67	118.276	10.241	7.471	1.00	2.00
ATOM	8729	OG	SER	M	67	118.367	9.268	6.444	1.00	7.90
ATOM	8730	N	GLY	M	68	115.870	8.287	7.734	1.00	4.81
ATOM	8731	CA	GLY	M	68	115.239	7.042	7.362	1.00	4.75
ATOM	8732	C	GLY	M	68	114.277	7.189	6.197	1.00	6.29
ATOM	8733	O	GLY	M	68	113.764	8.276	5.920	1.00	5.28
ATOM	8734	N	SER	M	69	114.080	6.101	5.467	1.00	4.26
ATOM	8735	CA	SER	M	69	113.144	6.108	4.368	1.00	6.19
ATOM	8736	C	SER	M	69	112.501	4.724	4.125	1.00	6.02
ATOM	8737	O	SER	M	69	112.804	3.738	4.794	1.00	4.84
ATOM	8738	CB	SER	M	69	113.822	6.601	3.098	1.00	8.68
ATOM	8739	OG	SER	M	69	113.801	5.578	2.108	1.00	18.33
ATOM	8740	N	GLY	M	70	111.604	4.654	3.156	1.00	4.78
ATOM	8741	CA	GLY	M	70	110.945	3.403	2.894	1.00	9.98
ATOM	8742	C	GLY	M	70	109.442	3.605	2.815	1.00	14.37
ATOM	8743	O	GLY	M	70	108.912	4.725	2.925	1.00	18.71
ATOM	8744	N	SER	M	71	108.742	2.495	2.638	1.00	10.81
ATOM	8745	CA	SER	M	71	107.307	2.512	2.538	1.00	9.03
ATOM	8746	C	SER	M	71	106.815	1.096	2.271	1.00	14.39
ATOM	8747	O	SER	M	71	107.559	0.250	1.763	1.00	16.50
ATOM	8748	CB	SER	M	71	106.914	3.431	1.415	1.00	4.05
ATOM	8749	OG	SER	M	71	106.968	2.728	0.205	1.00	13.07
ATOM	8750	N	GLY	M	72	105.566	0.826	2.633	1.00	16.34
ATOM	8751	CA	GLY	M	72	105.027	-0.504	2.418	1.00	11.17
ATOM	8752	C	GLY	M	72	105.721	-1.531	3.280	1.00	8.33
ATOM	8753	O	GLY	M	72	105.481	-1.586	4.489	1.00	9.10
ATOM	8754	N	THR	M	73	106.628	-2.311	2.703	1.00	6.28
ATOM	8755	CA	THR	M	73	107.276	-3.324	3.536	1.00	11.64
ATOM	8756	C	THR	M	73	108.751	-3.232	3.737	1.00	10.18
ATOM	8757	O	THR	M	73	109.320	-4.101	4.439	1.00	6.46
ATOM	8758	CB	THR	M	73	107.049	-4.742	3.060	1.00	7.33



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ATOM	8759	OG1	THR	M	73	107.379	-4.844	1.681	1.00	15.36
ATOM	8760	CG2	THR	M	73	105.656	-5.075	3.177	1.00	15.95
ATOM	8761	N	ASP	M	74	109.364	-2.209	3.127	1.00	8.22
ATOM	8762	CA	ASP	M	74	110.804	-2.025	3.230	1.00	4.15
ATOM	8763	C	ASP	M	74	111.195	-0.660	3.714	1.00	2.00
ATOM	8764	O	ASP	M	74	110.747	0.349	3.201	1.00	2.17
ATOM	8765	CB	ASP	M	74	111.459	-2.316	1.882	1.00	7.85
ATOM	8766	CG	ASP	M	74	111.427	-3.810	1.530	1.00	10.95
ATOM	8767	OD1	ASP	M	74	112.134	-4.636	2.207	1.00	8.38
ATOM	8768	OD2	ASP	M	74	110.673	-4.137	0.574	1.00	7.26
ATOM	8769	N	PHE	M	75	112.050	-0.637	4.717	1.00	2.44
ATOM	8770	CA	PHE	M	75	112.477	0.621	5.286	1.00	9.64
ATOM	8771	C	PHE	M	75	113.973	0.601	5.591	1.00	13.94
ATOM	8772	O	PHE	M	75	114.574	-0.464	5.824	1.00	13.66
ATOM	8773	CB	PHE	M	75	111.676	0.914	6.576	1.00	9.87
ATOM	8774	CG	PHE	M	75	110.210	1.029	6.339	1.00	7.55
ATOM	8775	CD1	PHE	M	75	109.418	-0.101	6.428	1.00	7.66
ATOM	8776	CD2	PHE	M	75	109.658	2.217	5.830	1.00	3.87
ATOM	8777	CE1	PHE	M	75	108.098	-0.077	5.992	1.00	7.62
ATOM	8778	CE2	PHE	M	75	108.353	2.267	5.398	1.00	3.64
ATOM	8779	CZ	PHE	M	75	107.559	1.111	5.468	1.00	8.00
ATOM	8780	N	THR	M	76	114.567	1.792	5.578	1.00	13.01
ATOM	8781	CA	THR	M	76	115.975	1.948	5.857	1.00	8.99
ATOM	8782	C	THR	M	76	116.132	3.062	6.850	1.00	11.94
ATOM	8783	O	THR	M	76	115.256	3.925	6.984	1.00	13.85
ATOM	8784	CB	THR	M	76	116.747	2.325	4.593	1.00	7.51
ATOM	8785	OG1	THR	M	76	116.196	3.520	4.005	1.00	7.86
ATOM	8786	CG2	THR	M	76	116.638	1.217	3.607	1.00	4.24
ATOM	8787	N	LEU	M	77	117.285	3.036	7.503	1.00	13.01
ATOM	8788	CA	LEU	M	77	117.706	4.006	8.503	1.00	8.38
ATOM	8789	C	LEU	M	77	119.177	4.214	8.159	1.00	8.55
ATOM	8790	O	LEU	M	77	119.935	3.233	8.057	1.00	8.17
ATOM	8791	CB	LEU	M	77	117.620	3.384	9.887	1.00	5.08
ATOM	8792	CG	LEU	M	77	118.180	4.170	11.065	1.00	2.00
ATOM	8793	CD1	LEU	M	77	119.507	3.686	11.441	1.00	2.00
ATOM	8794	CD2	LEU	M	77	118.201	5.577	10.727	1.00	2.00
ATOM	8795	N	THR	M	78	119.606	5.450	7.965	1.00	3.21
ATOM	8796	CA	THR	M	78	121.001	5.609	7.660	1.00	2.08
ATOM	8797	C	THR	M	78	121.713	6.810	8.244	1.00	2.00
ATOM	8798	O	THR	M	78	121.333	7.964	8.059	1.00	3.21
ATOM	8799	CB	THR	M	78	121.259	5.600	6.132	1.00	7.17
ATOM	8800	OG1	THR	M	78	121.970	6.788	5.786	1.00	12.19
ATOM	8801	CG2	THR	M	78	119.968	5.578	5.331	1.00	10.06
ATOM	8802	N	ILE	M	79	122.809	6.519	8.911	1.00	3.29
ATOM	8803	CA	ILE	M	79	123.645	7.563	9.477	1.00	6.90
ATOM	8804	C	ILE	M	79	124.474	8.109	8.293	1.00	6.75
ATOM	8805	O	ILE	M	79	125.030	7.340	7.535	1.00	4.70
ATOM	8806	CB	ILE	M	79	124.552	6.946	10.531	1.00	7.21
ATOM	8807	CG1	ILE	M	79	123.720	5.922	11.339	1.00	2.00
ATOM	8808	CG2	ILE	M	79	125.253	8.075	11.330	1.00	5.08
ATOM	8809	CD1	ILE	M	79	124.358	5.434	12.595	1.00	2.00
ATOM	8810	N	SER	M	80	124.545	9.420	8.095	1.00	10.26
ATOM	8811	CA	SER	M	80	125.319	9.934	6.953	1.00	12.09
ATOM	8812	C	SER	M	80	126.845	9.756	7.082	1.00	16.68
ATOM	8813	O	SER	M	80	127.544	9.747	6.070	1.00	26.51
ATOM	8814	CB	SER	M	80	124.987	11.398	6.671	1.00	4.28
ATOM	8815	OG	SER	M	80	125.193	12.190	7.817	1.00	18.02
ATOM	8816	N	SER	M	81	127.364	9.637	8.304	1.00	11.60
ATOM	8817	CA	SER	M	81	128.790	9.382	8.520	1.00	6.81
ATOM	8818	C	SER	M	81	128.968	8.992	9.991	1.00	6.29

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ATOM	8819	O	SER	M	81	128.964	9.829	10.913	1.00	2.40
ATOM	8820	CB	SER	M	81	129.580	10.614	8.211	1.00	7.43
ATOM	8821	OG	SER	M	81	129.277	11.560	9.217	1.00	26.01
ATOM	8822	N	VAL	M	82	129.125	7.690	10.189	1.00	3.72
ATOM	8823	CA	VAL	M	82	129.242	7.114	11.502	1.00	4.93
ATOM	8824	C	VAL	M	82	130.150	7.863	12.448	1.00	10.84
ATOM	8825	O	VAL	M	82	131.140	8.424	12.025	1.00	23.22
ATOM	8826	CB	VAL	M	82	129.721	5.721	11.362	1.00	3.50
ATOM	8827	CG1	VAL	M	82	129.962	5.126	12.733	1.00	11.33
ATOM	8828	CG2	VAL	M	82	128.678	4.926	10.591	1.00	2.06
ATOM	8829	N	GLU	M	83	129.806	7.915	13.725	1.00	9.43
ATOM	8830	CA	GLU	M	83	130.648	8.597	14.702	1.00	8.78
ATOM	8831	C	GLU	M	83	130.771	7.587	15.796	1.00	9.63
ATOM	8832	O	GLU	M	83	129.924	6.715	15.901	1.00	13.96
ATOM	8833	CB	GLU	M	83	129.984	9.875	15.194	1.00	9.49
ATOM	8834	CG	GLU	M	83	129.469	10.735	14.049	1.00	19.86
ATOM	8835	CD	GLU	M	83	129.237	12.217	14.428	1.00	29.09
ATOM	8836	OE1	GLU	M	83	129.168	12.560	15.645	1.00	31.39
ATOM	8837	OE2	GLU	M	83	129.115	13.049	13.492	1.00	28.98
ATOM	8838	N	PRO	M	84	131.839	7.647	16.600	1.00	11.39
ATOM	8839	CA	PRO	M	84	131.984	6.663	17.671	1.00	13.57
ATOM	8840	C	PRO	M	84	130.742	6.338	18.472	1.00	11.96
ATOM	8841	O	PRO	M	84	130.435	5.163	18.677	1.00	7.25
ATOM	8842	CB	PRO	M	84	133.102	7.234	18.522	1.00	13.84
ATOM	8843	CG	PRO	M	84	133.931	7.958	17.565	1.00	13.87
ATOM	8844	CD	PRO	M	84	132.989	8.557	16.559	1.00	13.62
ATOM	8845	N	GLU	M	85	130.016	7.371	18.888	1.00	16.43
ATOM	8846	CA	GLU	M	85	128.808	7.144	19.670	1.00	21.24
ATOM	8847	C	GLU	M	85	127.781	6.309	18.938	1.00	18.24
ATOM	8848	O	GLU	M	85	127.072	5.521	19.568	1.00	22.36
ATOM	8849	CB	GLU	M	85	128.147	8.456	20.162	1.00	27.87
ATOM	8850	CG	GLU	M	85	128.055	9.637	19.211	1.00	36.49
ATOM	8851	CD	GLU	M	85	127.163	10.786	19.771	1.00	45.23
ATOM	8852	OE1	GLU	M	85	126.960	11.807	19.059	1.00	48.20
ATOM	8853	OE2	GLU	M	85	126.661	10.672	20.923	1.00	47.17
ATOM	8854	N	ASP	M	86	127.738	6.430	17.616	1.00	9.74
ATOM	8855	CA	ASP	M	86	126.769	5.686	16.828	1.00	2.88
ATOM	8856	C	ASP	M	86	126.900	4.189	16.862	1.00	2.00
ATOM	8857	O	ASP	M	86	126.000	3.505	16.418	1.00	3.99
ATOM	8858	CB	ASP	M	86	126.813	6.092	15.365	1.00	2.00
ATOM	8859	CG	ASP	M	86	126.502	7.539	15.165	1.00	4.32
ATOM	8860	OD1	ASP	M	86	126.164	8.184	16.160	1.00	11.27
ATOM	8861	OD2	ASP	M	86	126.596	8.057	14.034	1.00	9.02
ATOM	8862	N	PHE	M	87	128.034	3.651	17.270	1.00	6.97
ATOM	8863	CA	PHE	M	87	128.121	2.199	17.289	1.00	15.07
ATOM	8864	C	PHE	M	87	127.191	1.663	18.354	1.00	16.66
ATOM	8865	O	PHE	M	87	127.279	2.030	19.547	1.00	13.41
ATOM	8866	CB	PHE	M	87	129.569	1.715	17.509	1.00	16.70
ATOM	8867	CG	PHE	M	87	130.459	1.884	16.289	1.00	19.14
ATOM	8868	CD1	PHE	M	87	131.429	2.905	16.256	1.00	14.11
ATOM	8869	CD2	PHE	M	87	130.259	1.095	15.153	1.00	11.31
ATOM	8870	CE1	PHE	M	87	132.153	3.139	15.126	1.00	14.38
ATOM	8871	CE2	PHE	M	87	130.983	1.323	14.023	1.00	19.69
ATOM	8872	CZ	PHE	M	87	131.935	2.352	13.997	1.00	18.99
ATOM	8873	N	ALA	M	88	126.275	0.812	17.904	1.00	14.69
ATOM	8874	CA	ALA	M	88	125.307	0.254	18.806	1.00	12.46
ATOM	8875	C	ALA	M	88	124.526	-0.770	18.037	1.00	13.41
ATOM	8876	O	ALA	M	88	124.941	-1.207	16.976	1.00	18.95
ATOM	8877	CB	ALA	M	88	124.373	1.367	19.270	1.00	12.63
ATOM	8878	N	THR	M	89	123.365	-1.132	18.565	1.00	12.22

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ATOM	8879	CA	THR	M	89	122.509	-2.054	17.881	1.00	10.30
ATOM	8880	C	THR	M	89	121.176	-1.333	17.589	1.00	9.22
ATOM	8881	O	THR	M	89	120.671	-0.588	18.436	1.00	5.52
ATOM	8882	CB	THR	M	89	122.353	-3.283	18.683	1.00	5.88
ATOM	8883	OG1	THR	M	89	123.258	-4.256	18.166	1.00	17.63
ATOM	8884	CG2	THR	M	89	121.027	-3.828	18.510	1.00	9.50
ATOM	8885	N	TYR	M	90	120.662	-1.494	16.362	1.00	7.49
ATOM	8886	CA	TYR	M	90	119.428	-0.822	15.936	1.00	8.77
ATOM	8887	C	TYR	M	90	118.223	-1.710	15.602	1.00	9.20
ATOM	8888	O	TYR	M	90	118.332	-2.734	14.906	1.00	5.69
ATOM	8889	CB	TYR	M	90	119.710	0.059	14.714	1.00	8.75
ATOM	8890	CG	TYR	M	90	120.727	1.133	14.944	1.00	8.65
ATOM	8891	CD1	TYR	M	90	122.019	0.816	15.365	1.00	6.78
ATOM	8892	CD2	TYR	M	90	120.384	2.475	14.800	1.00	8.27
ATOM	8893	CE1	TYR	M	90	122.941	1.806	15.646	1.00	8.16
ATOM	8894	CE2	TYR	M	90	121.292	3.472	15.079	1.00	7.98
ATOM	8895	CZ	TYR	M	90	122.559	3.134	15.502	1.00	8.62
ATOM	8896	OH	TYR	M	90	123.408	4.154	15.799	1.00	13.04
ATOM	8897	N	TYR	M	91	117.062	-1.283	16.096	1.00	8.75
ATOM	8898	CA	TYR	M	91	115.820	-2.005	15.858	1.00	8.33
ATOM	8899	C	TYR	M	91	114.854	-1.140	15.085	1.00	8.64
ATOM	8900	O	TYR	M	91	114.814	0.091	15.259	1.00	7.61
ATOM	8901	CB	TYR	M	91	115.161	-2.418	17.190	1.00	6.98
ATOM	8902	CG	TYR	M	91	115.997	-3.326	18.085	1.00	2.80
ATOM	8903	CD1	TYR	M	91	116.014	-4.719	17.885	1.00	2.00
ATOM	8904	CD2	TYR	M	91	116.785	-2.786	19.100	1.00	2.00
ATOM	8905	CE1	TYR	M	91	116.777	-5.529	18.652	1.00	2.00
ATOM	8906	CE2	TYR	M	91	117.551	-3.590	19.881	1.00	2.00
ATOM	8907	CZ	TYR	M	91	117.541	-4.973	19.653	1.00	2.00
ATOM	8908	OH	TYR	M	91	118.280	-5.796	20.466	1.00	2.39
ATOM	8909	N	CYS	M	92	114.139	-1.779	14.169	1.00	7.58
ATOM	8910	CA	CYS	M	92	113.109	-1.073	13.426	1.00	12.71
ATOM	8911	C	CYS	M	92	111.907	-1.682	14.149	1.00	17.64
ATOM	8912	O	CYS	M	92	112.025	-2.815	14.677	1.00	14.38
ATOM	8913	CB	CYS	M	92	113.097	-1.447	11.927	1.00	4.07
ATOM	8914	SG	CYS	M	92	112.952	-3.229	11.708	1.00	8.83
ATOM	8915	N	GLN	M	93	110.798	-0.917	14.226	1.00	21.26
ATOM	8916	CA	GLN	M	93	109.542	-1.380	14.846	1.00	16.35
ATOM	8917	C	GLN	M	93	108.326	-0.622	14.364	1.00	12.27
ATOM	8918	O	GLN	M	93	108.319	0.618	14.387	1.00	5.97
ATOM	8919	CB	GLN	M	93	109.568	-1.280	16.360	1.00	15.62
ATOM	8920	CG	GLN	M	93	108.158	-1.196	16.958	1.00	19.94
ATOM	8921	CD	GLN	M	93	107.844	0.219	17.487	1.00	16.94
ATOM	8922	OE1	GLN	M	93	106.909	0.425	18.269	1.00	3.28
ATOM	8923	NE2	GLN	M	93	108.647	1.191	17.053	1.00	14.04
ATOM	8924	N	HIS	M	94	107.296	-1.386	13.968	1.00	10.42
ATOM	8925	CA	HIS	M	94	106.047	-0.815	13.468	1.00	8.13
ATOM	8926	C	HIS	M	94	105.059	-0.450	14.592	1.00	10.96
ATOM	8927	O	HIS	M	94	105.366	-0.493	15.810	1.00	5.80
ATOM	8928	CB	HIS	M	94	105.359	-1.771	12.502	1.00	5.03
ATOM	8929	CG	HIS	M	94	104.612	-2.866	13.184	1.00	17.87
ATOM	8930	ND1	HIS	M	94	103.674	-3.641	12.540	1.00	26.23
ATOM	8931	CD2	HIS	M	94	104.696	-3.351	14.451	1.00	17.96
ATOM	8932	CE1	HIS	M	94	103.213	-4.562	13.375	1.00	24.46
ATOM	8933	NE2	HIS	M	94	103.818	-4.402	14.542	1.00	17.68
ATOM	8934	N	SER	M	95	103.858	-0.096	14.146	1.00	10.35
ATOM	8935	CA	SER	M	95	102.776	0.326	15.011	1.00	6.95
ATOM	8936	C	SER	M	95	101.561	0.293	14.093	1.00	5.81
ATOM	8937	O	SER	M	95	100.684	1.136	14.130	1.00	7.89
ATOM	8938	CB	SER	M	95	103.049	1.743	15.523	1.00	2.00

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ATOM	8939	OG	SER	M	95	102.940	2.634	14.443	1.00	2.00
ATOM	8940	N	TRP	M	96	101.530	-0.698	13.234	1.00	8.02
ATOM	8941	CA	TRP	M	96	100.417	-0.832	12.318	1.00	12.77
ATOM	8942	C	TRP	M	96	99.216	-1.439	13.022	1.00	14.73
ATOM	8943	O	TRP	M	96	98.055	-1.149	12.679	1.00	20.08
ATOM	8944	CB	TRP	M	96	100.802	-1.757	11.192	1.00	9.13
ATOM	8945	CG	TRP	M	96	99.797	-1.842	10.137	1.00	2.00
ATOM	8946	CD1	TRP	M	96	99.038	-2.921	9.832	1.00	2.00
ATOM	8947	CD2	TRP	M	96	99.535	-0.866	9.131	1.00	2.00
ATOM	8948	NE1	TRP	M	96	98.318	-2.685	8.694	1.00	2.07
ATOM	8949	CE2	TRP	M	96	98.616	-1.431	8.235	1.00	2.00
ATOM	8950	CE3	TRP	M	96	99.991	0.435	8.901	1.00	2.00
ATOM	8951	CZ2	TRP	M	96	98.147	-0.762	7.125	1.00	2.00
ATOM	8952	CZ3	TRP	M	96	99.519	1.107	7.784	1.00	5.11
ATOM	8953	CH2	TRP	M	96	98.609	0.500	6.910	1.00	2.15
ATOM	8954	N	GLU	M	97	99.511	-2.289	13.997	1.00	7.37
ATOM	8955	CA	GLU	M	97	98.483	-2.959	14.733	1.00	4.65
ATOM	8956	C	GLU	M	97	98.935	-3.504	16.081	1.00	6.12
ATOM	8957	O	GLU	M	97	100.061	-3.259	16.529	1.00	10.44
ATOM	8958	CB	GLU	M	97	97.924	-4.044	13.847	1.00	5.39
ATOM	8959	CG	GLU	M	97	98.527	-5.378	13.996	1.00	7.70
ATOM	8960	CD	GLU	M	97	98.097	-6.274	12.820	1.00	22.66
ATOM	8961	OE1	GLU	M	97	97.299	-5.787	11.971	1.00	27.27
ATOM	8962	OE2	GLU	M	97	98.545	-7.452	12.726	1.00	23.83
ATOM	8963	N	ILE	M	98	98.033	-4.142	16.810	1.00	5.08
ATOM	8964	CA	ILE	M	98	98.472	-4.704	18.073	1.00	5.02
ATOM	8965	C	ILE	M	98	98.783	-6.121	17.722	1.00	7.43
ATOM	8966	O	ILE	M	98	98.012	-6.706	16.985	1.00	14.75
ATOM	8967	CB	ILE	M	98	97.393	-4.712	19.095	1.00	2.00
ATOM	8968	CG1	ILE	M	98	97.174	-3.298	19.579	1.00	7.46
ATOM	8969	CG2	ILE	M	98	97.804	-5.529	20.253	1.00	2.00
ATOM	8970	CD1	ILE	M	98	96.744	-3.187	21.028	1.00	19.30
ATOM	8971	N	PRO	M	99	99.936	-6.676	18.174	1.00	5.62
ATOM	8972	CA	PRO	M	99	100.965	-6.021	18.995	1.00	3.67
ATOM	8973	C	PRO	M	99	102.081	-5.359	18.200	1.00	5.10
ATOM	8974	O	PRO	M	99	102.463	-5.822	17.133	1.00	5.71
ATOM	8975	CB	PRO	M	99	101.528	-7.163	19.805	1.00	2.00
ATOM	8976	CG	PRO	M	99	101.464	-8.327	18.801	1.00	2.00
ATOM	8977	CD	PRO	M	99	100.279	-8.087	17.913	1.00	2.00
ATOM	8978	N	PRO	M	100	102.607	-4.244	18.695	1.00	6.38
ATOM	8979	CA	PRO	M	100	103.682	-3.684	17.910	1.00	6.46
ATOM	8980	C	PRO	M	100	104.761	-4.764	18.083	1.00	7.40
ATOM	8981	O	PRO	M	100	104.860	-5.393	19.148	1.00	2.00
ATOM	8982	CB	PRO	M	100	104.037	-2.414	18.677	1.00	7.29
ATOM	8983	CG	PRO	M	100	103.775	-2.733	20.003	1.00	5.27
ATOM	8984	CD	PRO	M	100	102.422	-3.452	19.905	1.00	11.02
ATOM	8985	N	THR	M	101	105.583	-4.940	17.050	1.00	12.15
ATOM	8986	CA	THR	M	101	106.662	-5.922	17.062	1.00	5.99
ATOM	8987	C	THR	M	101	107.974	-5.337	16.534	1.00	8.91
ATOM	8988	O	THR	M	101	108.007	-4.444	15.668	1.00	6.95
ATOM	8989	CB	THR	M	101	106.273	-7.076	16.278	1.00	2.05
ATOM	8990	OG1	THR	M	101	105.933	-6.657	14.938	1.00	2.29
ATOM	8991	CG2	THR	M	101	105.132	-7.704	16.993	1.00	2.00
ATOM	8992	N	PHE	M	102	109.065	-5.790	17.135	1.00	11.73
ATOM	8993	CA	PHE	M	102	110.376	-5.307	16.756	1.00	13.80
ATOM	8994	C	PHE	M	102	111.106	-6.227	15.761	1.00	14.04
ATOM	8995	O	PHE	M	102	110.802	-7.439	15.671	1.00	11.58
ATOM	8996	CB	PHE	M	102	111.219	-5.112	18.026	1.00	13.28
ATOM	8997	CG	PHE	M	102	110.703	-4.032	18.968	1.00	7.14
ATOM	8998	CD1	PHE	M	102	109.874	-4.358	20.012	1.00	2.00

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ATOM	8999	CD2	PHE	M	102	111.170	-2.741	18.891	1.00	3.72
ATOM	9000	CE1	PHE	M	102	109.538	-3.421	20.970	1.00	5.68
ATOM	9001	CE2	PHE	M	102	110.830	-1.794	19.857	1.00	7.33
ATOM	9002	CZ	PHE	M	102	110.018	-2.138	20.900	1.00	5.22
ATOM	9003	N	GLY	M	103	112.039	-5.613	15.004	1.00	13.40
ATOM	9004	CA	GLY	M	103	112.874	-6.318	14.042	1.00	3.30
ATOM	9005	C	GLY	M	103	113.905	-7.095	14.856	1.00	3.04
ATOM	9006	O	GLY	M	103	114.029	-6.889	16.062	1.00	5.12
ATOM	9007	N	GLY	M	104	114.658	-7.977	14.219	1.00	4.86
ATOM	9008	CA	GLY	M	104	115.621	-8.761	14.966	1.00	4.76
ATOM	9009	C	GLY	M	104	116.773	-7.973	15.522	1.00	3.78
ATOM	9010	O	GLY	M	104	117.407	-8.419	16.459	1.00	2.00
ATOM	9011	N	GLY	M	105	117.058	-6.828	14.906	1.00	6.40
ATOM	9012	CA	GLY	M	105	118.159	-5.993	15.340	1.00	6.54
ATOM	9013	C	GLY	M	105	119.349	-6.117	14.368	1.00	9.36
ATOM	9014	O	GLY	M	105	119.512	-7.101	13.627	1.00	6.97
ATOM	9015	N	THR	M	106	120.192	-5.097	14.359	1.00	7.57
ATOM	9016	CA	THR	M	106	121.359	-5.093	13.521	1.00	2.83
ATOM	9017	C	THR	M	106	122.379	-4.447	14.403	1.00	5.73
ATOM	9018	O	THR	M	106	122.102	-3.401	14.987	1.00	5.08
ATOM	9019	CB	THR	M	106	121.150	-4.247	12.312	1.00	2.00
ATOM	9020	OG1	THR	M	106	120.586	-5.055	11.275	1.00	5.69
ATOM	9021	CG2	THR	M	106	122.443	-3.713	11.847	1.00	7.05
ATOM	9022	N	LYS	M	107	123.548	-5.080	14.521	1.00	5.89
ATOM	9023	CA	LYS	M	107	124.603	-4.545	15.356	1.00	3.89
ATOM	9024	C	LYS	M	107	125.401	-3.699	14.402	1.00	7.31
ATOM	9025	O	LYS	M	107	125.676	-4.123	13.274	1.00	11.41
ATOM	9026	CB	LYS	M	107	125.494	-5.658	15.877	1.00	3.90
ATOM	9027	CG	LYS	M	107	126.743	-5.143	16.537	1.00	6.98
ATOM	9028	CD	LYS	M	107	127.149	-6.063	17.654	1.00	2.00
ATOM	9029	CE	LYS	M	107	128.496	-6.699	17.430	1.00	2.00
ATOM	9030	NZ	LYS	M	107	129.165	-6.757	18.757	1.00	5.66
ATOM	9031	N	LEU	M	108	125.741	-2.497	14.819	1.00	5.28
ATOM	9032	CA	LEU	M	108	126.530	-1.630	13.977	1.00	7.60
ATOM	9033	C	LEU	M	108	127.944	-1.740	14.511	1.00	10.87
ATOM	9034	O	LEU	M	108	128.399	-0.882	15.300	1.00	14.97
ATOM	9035	CB	LEU	M	108	126.067	-0.181	14.060	1.00	6.12
ATOM	9036	CG	LEU	M	108	126.764	0.663	12.975	1.00	10.93
ATOM	9037	CD1	LEU	M	108	126.394	0.081	11.599	1.00	8.59
ATOM	9038	CD2	LEU	M	108	126.376	2.145	13.039	1.00	7.50
ATOM	9039	N	GLU	M	109	128.623	-2.796	14.051	1.00	9.84
ATOM	9040	CA	GLU	M	109	129.992	-3.131	14.429	1.00	9.86
ATOM	9041	C	GLU	M	109	131.025	-2.188	13.799	1.00	11.01
ATOM	9042	O	GLU	M	109	130.744	-1.535	12.782	1.00	8.57
ATOM	9043	CB	GLU	M	109	130.276	-4.566	14.011	1.00	7.69
ATOM	9044	CG	GLU	M	109	131.324	-5.279	14.816	1.00	7.77
ATOM	9045	CD	GLU	M	109	132.100	-6.185	13.890	1.00	11.55
ATOM	9046	OE1	GLU	M	109	132.382	-5.703	12.789	1.00	14.93
ATOM	9047	OE2	GLU	M	109	132.416	-7.356	14.195	1.00	12.89
ATOM	9048	N	ILE	M	110	132.206	-2.135	14.429	1.00	10.68
ATOM	9049	CA	ILE	M	110	133.340	-1.309	13.992	1.00	7.22
ATOM	9050	C	ILE	M	110	134.222	-2.097	12.988	1.00	10.14
ATOM	9051	O	ILE	M	110	134.761	-3.164	13.344	1.00	6.15
ATOM	9052	CB	ILE	M	110	134.245	-0.954	15.169	1.00	4.26
ATOM	9053	CG1	ILE	M	110	133.441	-0.307	16.302	1.00	2.00
ATOM	9054	CG2	ILE	M	110	135.312	-0.100	14.677	1.00	2.00
ATOM	9055	CD1	ILE	M	110	134.262	0.331	17.430	1.00	2.00
ATOM	9056	N	LYS	M	111	134.325	-1.610	11.737	1.00	9.49
ATOM	9057	CA	LYS	M	111	135.166	-2.275	10.720	1.00	5.80
ATOM	9058	C	LYS	M	111	136.580	-2.179	11.257	1.00	3.29

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ATOM	9059	O	LYS	M	111	136.954	-1.224	11.928	1.00	2.00
ATOM	9060	CB	LYS	M	111	135.091	-1.578	9.321	1.00	6.50
ATOM	9061	CG	LYS	M	111	134.968	-2.527	8.037	1.00	13.10
ATOM	9062	CD	LYS	M	111	134.763	-1.772	6.616	1.00	20.16
ATOM	9063	CE	LYS	M	111	133.247	-1.362	6.174	1.00	23.60
ATOM	9064	NZ	LYS	M	111	132.809	-1.055	4.679	1.00	2.00
ATOM	9065	N	ARG	M	112	137.374	-3.185	10.962	1.00	8.42
ATOM	9066	CA	ARG	M	112	138.775	-3.224	11.389	1.00	13.38
ATOM	9067	C	ARG	M	112	139.351	-4.460	10.675	1.00	17.74
ATOM	9068	O	ARG	M	112	138.649	-5.458	10.530	1.00	21.23
ATOM	9069	CB	ARG	M	112	138.888	-3.354	12.898	1.00	2.00
ATOM	9070	CG	ARG	M	112	138.347	-4.632	13.333	1.00	5.67
ATOM	9071	CD	ARG	M	112	139.437	-5.583	13.491	1.00	10.57
ATOM	9072	NE	ARG	M	112	140.359	-5.195	14.554	1.00	13.92
ATOM	9073	CZ	ARG	M	112	141.679	-5.191	14.396	1.00	10.77
ATOM	9074	NH1	ARG	M	112	142.186	-5.547	13.225	1.00	7.67
ATOM	9075	NH2	ARG	M	112	142.487	-4.894	15.412	1.00	6.47
ATOM	9076	N	THR	M	113	140.602	-4.391	10.208	1.00	19.61
ATOM	9077	CA	THR	M	113	141.201	-5.506	9.458	1.00	12.86
ATOM	9078	C	THR	M	113	141.185	-6.764	10.226	1.00	3.93
ATOM	9079	O	THR	M	113	141.286	-6.734	11.446	1.00	2.00
ATOM	9080	CB	THR	M	113	142.646	-5.266	9.079	1.00	14.54
ATOM	9081	OG1	THR	M	113	143.388	-4.999	10.272	1.00	23.60
ATOM	9082	CG2	THR	M	113	142.761	-4.085	8.099	1.00	14.88
ATOM	9083	N	VAL	M	114	141.051	-7.856	9.479	1.00	2.18
ATOM	9084	CA	VAL	M	114	140.994	-9.180	10.032	1.00	2.00
ATOM	9085	C	VAL	M	114	142.094	-9.355	11.036	1.00	3.22
ATOM	9086	O	VAL	M	114	142.986	-8.535	11.074	1.00	14.17
ATOM	9087	CB	VAL	M	114	141.130	-10.175	8.982	1.00	2.00
ATOM	9088	CG1	VAL	M	114	141.422	-11.466	9.625	1.00	2.00
ATOM	9089	CG2	VAL	M	114	139.859	-10.203	8.150	1.00	2.00
ATOM	9090	N	ALA	M	115	142.018	-10.363	11.893	1.00	2.00
ATOM	9091	CA	ALA	M	115	143.062	-10.577	12.887	1.00	2.00
ATOM	9092	C	ALA	M	115	142.862	-11.980	13.353	1.00	5.33
ATOM	9093	O	ALA	M	115	141.781	-12.315	13.812	1.00	14.69
ATOM	9094	CB	ALA	M	115	142.897	-9.638	14.041	1.00	2.00
ATOM	9095	N	ALA	M	116	143.869	-12.833	13.205	1.00	7.39
ATOM	9096	CA	ALA	M	116	143.711	-14.220	13.638	1.00	4.49
ATOM	9097	C	ALA	M	116	143.688	-14.285	15.133	1.00	2.00
ATOM	9098	O	ALA	M	116	144.211	-13.415	15.808	1.00	6.08
ATOM	9099	CB	ALA	M	116	144.790	-15.085	13.097	1.00	4.06
ATOM	9100	N	PRO	M	117	143.023	-15.285	15.681	1.00	2.11
ATOM	9101	CA	PRO	M	117	143.038	-15.276	17.124	1.00	5.21
ATOM	9102	C	PRO	M	117	144.210	-16.048	17.611	1.00	6.07
ATOM	9103	O	PRO	M	117	144.700	-16.908	16.896	1.00	9.32
ATOM	9104	CB	PRO	M	117	141.747	-15.998	17.463	1.00	8.47
ATOM	9105	CG	PRO	M	117	141.695	-17.097	16.421	1.00	2.00
ATOM	9106	CD	PRO	M	117	142.182	-16.377	15.163	1.00	3.62
ATOM	9107	N	SER	M	118	144.638	-15.758	18.831	1.00	5.48
ATOM	9108	CA	SER	M	118	145.702	-16.519	19.460	1.00	9.95
ATOM	9109	C	SER	M	118	145.017	-17.410	20.503	1.00	8.96
ATOM	9110	O	SER	M	118	144.607	-16.920	21.539	1.00	14.05
ATOM	9111	CB	SER	M	118	146.716	-15.608	20.171	1.00	13.77
ATOM	9112	OG	SER	M	118	146.123	-14.532	20.886	1.00	25.53
ATOM	9113	N	VAL	M	119	144.922	-18.707	20.259	1.00	4.92
ATOM	9114	CA	VAL	M	119	144.275	-19.591	21.205	1.00	11.76
ATOM	9115	C	VAL	M	119	145.186	-20.125	22.308	1.00	17.72
ATOM	9116	O	VAL	M	119	146.378	-20.254	22.117	1.00	23.37
ATOM	9117	CB	VAL	M	119	143.641	-20.753	20.478	1.00	11.25
ATOM	9118	CG1	VAL	M	119	143.308	-20.325	19.070	1.00	7.76

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ATOM	9119	CG2	VAL	M	119	144.537	-21.936	20.508	1.00	12.20
ATOM	9120	N	PHE	M	120	144.618	-20.410	23.475	1.00	23.19
ATOM	9121	CA	PHE	M	120	145.381	-20.939	24.614	1.00	27.08
ATOM	9122	C	PHE	M	120	144.457	-21.876	25.375	1.00	27.14
ATOM	9123	O	PHE	M	120	143.345	-21.493	25.682	1.00	31.51
ATOM	9124	CB	PHE	M	120	145.815	-19.836	25.592	1.00	25.21
ATOM	9125	CG	PHE	M	120	146.352	-18.613	24.949	1.00	22.58
ATOM	9126	CD1	PHE	M	120	147.696	-18.314	25.037	1.00	28.01
ATOM	9127	CD2	PHE	M	120	145.504	-17.708	24.343	1.00	23.04
ATOM	9128	CE1	PHE	M	120	148.190	-17.115	24.533	1.00	32.59
ATOM	9129	CE2	PHE	M	120	145.979	-16.507	23.833	1.00	29.11
ATOM	9130	CZ	PHE	M	120	147.320	-16.204	23.926	1.00	31.28
ATOM	9131	N	ILE	M	121	144.939	-23.062	25.734	1.00	25.57
ATOM	9132	CA	ILE	M	121	144.121	-24.040	26.421	1.00	18.51
ATOM	9133	C	ILE	M	121	144.567	-24.285	27.828	1.00	20.80
ATOM	9134	O	ILE	M	121	145.712	-24.628	28.059	1.00	25.15
ATOM	9135	CB	ILE	M	121	144.171	-25.339	25.678	1.00	15.99
ATOM	9136	CG1	ILE	M	121	143.455	-26.418	26.450	1.00	14.78
ATOM	9137	CG2	ILE	M	121	145.591	-25.751	25.476	1.00	17.13
ATOM	9138	CD1	ILE	M	121	142.938	-27.534	25.513	1.00	13.40
ATOM	9139	N	PHE	M	122	143.646	-24.118	28.765	1.00	22.86
ATOM	9140	CA	PHE	M	122	143.923	-24.323	30.180	1.00	25.36
ATOM	9141	C	PHE	M	122	143.275	-25.625	30.655	1.00	27.77
ATOM	9142	O	PHE	M	122	142.083	-25.865	30.420	1.00	25.45
ATOM	9143	CB	PHE	M	122	143.385	-23.158	30.997	1.00	25.03
ATOM	9144	CG	PHE	M	122	143.943	-21.826	30.603	1.00	25.35
ATOM	9145	CD1	PHE	M	122	144.818	-21.145	31.458	1.00	26.23
ATOM	9146	CD2	PHE	M	122	143.529	-21.208	29.424	1.00	24.53
ATOM	9147	CE1	PHE	M	122	145.271	-19.846	31.152	1.00	28.97
ATOM	9148	CE2	PHE	M	122	143.969	-19.912	29.099	1.00	28.33
ATOM	9149	CZ	PHE	M	122	144.844	-19.223	29.969	1.00	26.39
ATOM	9150	N	PRO	M	123	144.064	-26.509	31.295	1.00	29.83
ATOM	9151	CA	PRO	M	123	143.542	-27.781	31.788	1.00	30.64
ATOM	9152	C	PRO	M	123	143.124	-27.580	33.264	1.00	35.01
ATOM	9153	O	PRO	M	123	143.637	-26.653	33.930	1.00	33.97
ATOM	9154	CB	PRO	M	123	144.728	-28.735	31.595	1.00	23.82
ATOM	9155	CG	PRO	M	123	145.924	-27.840	31.318	1.00	27.82
ATOM	9156	CD	PRO	M	123	145.501	-26.422	31.571	1.00	27.63
ATOM	9157	N	PRO	M	124	142.170	-28.423	33.775	1.00	35.84
ATOM	9158	CA	PRO	M	124	141.589	-28.456	35.126	1.00	34.45
ATOM	9159	C	PRO	M	124	142.465	-28.105	36.303	1.00	39.42
ATOM	9160	O	PRO	M	124	143.462	-28.776	36.589	1.00	43.77
ATOM	9161	CB	PRO	M	124	141.062	-29.871	35.252	1.00	30.30
ATOM	9162	CG	PRO	M	124	140.602	-30.195	33.904	1.00	29.39
ATOM	9163	CD	PRO	M	124	141.569	-29.488	32.946	1.00	34.94
ATOM	9164	N	SER	M	125	142.074	-27.043	36.993	1.00	44.08
ATOM	9165	CA	SER	M	125	142.792	-26.584	38.168	1.00	48.35
ATOM	9166	C	SER	M	125	142.814	-27.759	39.073	1.00	50.22
ATOM	9167	O	SER	M	125	141.769	-28.287	39.389	1.00	48.49
ATOM	9168	CB	SER	M	125	142.043	-25.453	38.841	1.00	49.66
ATOM	9169	OG	SER	M	125	140.854	-25.173	38.120	1.00	59.10
ATOM	9170	N	ASP	M	126	144.010	-28.202	39.446	1.00	58.24
ATOM	9171	CA	ASP	M	126	144.152	-29.354	40.335	1.00	59.37
ATOM	9172	C	ASP	M	126	143.178	-29.108	41.472	1.00	56.49
ATOM	9173	O	ASP	M	126	142.425	-29.997	41.840	1.00	51.58
ATOM	9174	CB	ASP	M	126	145.595	-29.459	40.873	1.00	65.48
ATOM	9175	CG	ASP	M	126	146.488	-30.347	40.002	1.00	70.40
ATOM	9176	OD1	ASP	M	126	145.910	-31.162	39.246	1.00	74.89
ATOM	9177	OD2	ASP	M	126	147.746	-30.234	40.074	1.00	70.36
ATOM	9178	N	GLU	M	127	143.174	-27.878	41.985	1.00	56.30

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ATOM	9179	CA	GLU	M	127	142.280	-27.496	43.081	1.00	57.43
ATOM	9180	C	GLU	M	127	140.807	-27.692	42.736	1.00	55.39
ATOM	9181	O	GLU	M	127	140.008	-28.003	43.603	1.00	55.05
ATOM	9182	CB	GLU	M	127	142.497	-26.038	43.475	1.00	61.38
ATOM	9183	CG	GLU	M	127	141.439	-25.505	44.438	1.00	67.19
ATOM	9184	CD	GLU	M	127	141.677	-24.047	44.827	1.00	73.77
ATOM	9185	OE1	GLU	M	127	140.774	-23.450	45.467	1.00	73.47
ATOM	9186	OE2	GLU	M	127	142.767	-23.506	44.491	1.00	77.14
ATOM	9187	N	GLN	M	128	140.448	-27.494	41.475	1.00	55.19
ATOM	9188	CA	GLN	M	128	139.065	-27.675	41.025	1.00	53.63
ATOM	9189	C	GLN	M	128	138.716	-29.170	40.833	1.00	55.44
ATOM	9190	O	GLN	M	128	137.537	-29.548	40.824	1.00	52.87
ATOM	9191	CB	GLN	M	128	138.855	-26.931	39.707	1.00	52.33
ATOM	9192	CG	GLN	M	128	137.408	-26.831	39.241	1.00	50.73
ATOM	9193	CD	GLN	M	128	137.240	-27.091	37.742	1.00	50.34
ATOM	9194	OE1	GLN	M	128	138.098	-26.747	36.938	1.00	49.81
ATOM	9195	NE2	GLN	M	128	136.120	-27.686	37.370	1.00	49.31
ATOM	9196	N	LEU	M	129	139.725	-30.021	40.641	1.00	56.25
ATOM	9197	CA	LEU	M	129	139.449	-31.453	40.482	1.00	57.87
ATOM	9198	C	LEU	M	129	139.163	-32.059	41.871	1.00	60.52
ATOM	9199	O	LEU	M	129	138.507	-33.109	42.000	1.00	58.01
ATOM	9200	CB	LEU	M	129	140.635	-32.151	39.827	1.00	54.86
ATOM	9201	CG	LEU	M	129	140.707	-31.895	38.327	1.00	54.71
ATOM	9202	CD1	LEU	M	129	142.183	-31.853	37.846	1.00	60.20
ATOM	9203	CD2	LEU	M	129	139.934	-32.979	37.638	1.00	45.56
ATOM	9204	N	LYS	M	130	139.658	-31.374	42.906	1.00	61.39
ATOM	9205	CA	LYS	M	130	139.459	-31.791	44.295	1.00	61.92
ATOM	9206	C	LYS	M	130	137.998	-31.532	44.634	1.00	62.84
ATOM	9207	O	LYS	M	130	137.608	-31.558	45.808	1.00	63.02
ATOM	9208	CB	LYS	M	130	140.355	-30.969	45.244	1.00	61.00
ATOM	9209	CG	LYS	M	130	141.221	-31.787	46.210	1.00	63.09
ATOM	9210	CD	LYS	M	130	142.000	-32.923	45.508	1.00	66.47
ATOM	9211	CE	LYS	M	130	143.460	-32.962	45.973	1.00	68.94
ATOM	9212	NZ	LYS	M	130	144.019	-34.323	46.201	1.00	69.95
ATOM	9213	N	SER	M	131	137.200	-31.285	43.591	1.00	62.37
ATOM	9214	CA	SER	M	131	135.778	-30.992	43.733	1.00	60.06
ATOM	9215	C	SER	M	131	134.920	-31.807	42.796	1.00	58.16
ATOM	9216	O	SER	M	131	133.772	-31.467	42.543	1.00	56.26
ATOM	9217	CB	SER	M	131	135.517	-29.517	43.479	1.00	59.75
ATOM	9218	OG	SER	M	131	136.734	-28.806	43.571	1.00	63.79
ATOM	9219	N	GLY	M	132	135.487	-32.871	42.253	1.00	59.61
ATOM	9220	CA	GLY	M	132	134.705	-33.737	41.389	1.00	59.70
ATOM	9221	C	GLY	M	132	134.362	-33.168	40.031	1.00	58.10
ATOM	9222	O	GLY	M	132	133.823	-33.862	39.175	1.00	57.46
ATOM	9223	N	THR	M	133	134.669	-31.900	39.817	1.00	59.29
ATOM	9224	CA	THR	M	133	134.390	-31.298	38.515	1.00	58.67
ATOM	9225	C	THR	M	133	135.669	-30.900	37.803	1.00	56.02
ATOM	9226	O	THR	M	133	136.589	-30.299	38.392	1.00	54.38
ATOM	9227	CB	THR	M	133	133.529	-30.040	38.610	1.00	58.68
ATOM	9228	OG1	THR	M	133	133.034	-29.894	39.947	1.00	63.99
ATOM	9229	CG2	THR	M	133	132.388	-30.116	37.618	1.00	56.95
ATOM	9230	N	ALA	M	134	135.704	-31.246	36.526	1.00	49.93
ATOM	9231	CA	ALA	M	134	136.834	-30.945	35.697	1.00	47.38
ATOM	9232	C	ALA	M	134	136.345	-30.153	34.504	1.00	44.74
ATOM	9233	O	ALA	M	134	135.631	-30.680	33.657	1.00	47.92
ATOM	9234	CB	ALA	M	134	137.500	-32.242	35.244	1.00	47.15
ATOM	9235	N	SER	M	135	136.721	-28.888	34.430	1.00	37.96
ATOM	9236	CA	SER	M	135	136.311	-28.094	33.293	1.00	34.51
ATOM	9237	C	SER	M	135	137.548	-27.539	32.590	1.00	31.96
ATOM	9238	O	SER	M	135	138.397	-26.915	33.219	1.00	32.37



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ATOM	9239	CB	SER	M	135	135.391	-26.947	33.741	1.00	36.66
ATOM	9240	OG	SER	M	135	135.914	-26.254	34.859	1.00	35.65
ATOM	9241	N	VAL	M	136	137.663	-27.778	31.291	1.00	28.06
ATOM	9242	CA	VAL	M	136	138.798	-27.252	30.549	1.00	27.79
ATOM	9243	C	VAL	M	136	138.421	-26.044	29.699	1.00	25.22
ATOM	9244	O	VAL	M	136	137.538	-26.118	28.853	1.00	21.88
ATOM	9245	CB	VAL	M	136	139.410	-28.300	29.627	1.00	32.31
ATOM	9246	CG1	VAL	M	136	138.317	-29.092	28.952	1.00	32.45
ATOM	9247	CG2	VAL	M	136	140.320	-27.622	28.611	1.00	28.30
ATOM	9248	N	VAL	M	137	139.128	-24.938	29.916	1.00	23.66
ATOM	9249	CA	VAL	M	137	138.880	-23.707	29.181	1.00	18.94
ATOM	9250	C	VAL	M	137	139.883	-23.468	28.057	1.00	19.41
ATOM	9251	O	VAL	M	137	141.093	-23.553	28.237	1.00	21.06
ATOM	9252	CB	VAL	M	137	138.983	-22.501	30.064	1.00	14.77
ATOM	9253	CG1	VAL	M	137	139.010	-21.282	29.213	1.00	16.81
ATOM	9254	CG2	VAL	M	137	137.853	-22.445	31.009	1.00	18.32
ATOM	9255	N	CYS	M	138	139.352	-23.140	26.901	1.00	19.58
ATOM	9256	CA	CYS	M	138	140.138	-22.850	25.718	1.00	22.49
ATOM	9257	C	CYS	M	138	139.858	-21.371	25.463	1.00	22.69
ATOM	9258	O	CYS	M	138	138.745	-20.915	25.666	1.00	28.84
ATOM	9259	CB	CYS	M	138	139.656	-23.744	24.593	1.00	25.82
ATOM	9260	SG	CYS	M	138	139.781	-23.116	22.912	1.00	35.45
ATOM	9261	N	LEU	M	139	140.853	-20.610	25.028	1.00	22.70
ATOM	9262	CA	LEU	M	139	140.668	-19.171	24.877	1.00	18.65
ATOM	9263	C	LEU	M	139	141.198	-18.578	23.603	1.00	19.21
ATOM	9264	O	LEU	M	139	142.362	-18.705	23.333	1.00	24.63
ATOM	9265	CB	LEU	M	139	141.349	-18.482	26.057	1.00	8.86
ATOM	9266	CG	LEU	M	139	141.838	-17.066	25.831	1.00	5.71
ATOM	9267	CD1	LEU	M	139	140.681	-16.123	25.779	1.00	8.77
ATOM	9268	CD2	LEU	M	139	142.780	-16.701	26.929	1.00	3.37
ATOM	9269	N	LEU	M	140	140.354	-17.916	22.828	1.00	20.30
ATOM	9270	CA	LEU	M	140	140.789	-17.269	21.591	1.00	20.31
ATOM	9271	C	LEU	M	140	141.013	-15.766	21.841	1.00	20.78
ATOM	9272	O	LEU	M	140	140.037	-15.016	21.859	1.00	24.02
ATOM	9273	CB	LEU	M	140	139.712	-17.468	20.518	1.00	17.25
ATOM	9274	CG	LEU	M	140	139.627	-18.907	19.970	1.00	21.44
ATOM	9275	CD1	LEU	M	140	139.125	-19.860	21.003	1.00	17.01
ATOM	9276	CD2	LEU	M	140	138.762	-18.954	18.745	1.00	21.92
ATOM	9277	N	ASN	M	141	142.262	-15.305	22.014	1.00	16.90
ATOM	9278	CA	ASN	M	141	142.440	-13.879	22.271	1.00	16.87
ATOM	9279	C	ASN	M	141	142.498	-12.954	21.101	1.00	15.78
ATOM	9280	O	ASN	M	141	142.904	-13.300	20.016	1.00	20.48
ATOM	9281	CB	ASN	M	141	143.631	-13.523	23.160	1.00	19.55
ATOM	9282	CG	ASN	M	141	143.396	-12.169	23.923	1.00	28.56
ATOM	9283	OD1	ASN	M	141	144.314	-11.501	24.398	1.00	31.16
ATOM	9284	ND2	ASN	M	141	142.141	-11.789	24.036	1.00	34.78
ATOM	9285	N	ASN	M	142	141.985	-11.772	21.354	1.00	18.43
ATOM	9286	CA	ASN	M	142	141.920	-10.677	20.421	1.00	19.60
ATOM	9287	C	ASN	M	142	141.838	-10.996	18.936	1.00	17.93
ATOM	9288	O	ASN	M	142	142.783	-10.786	18.204	1.00	24.72
ATOM	9289	CB	ASN	M	142	143.063	-9.730	20.759	1.00	22.95
ATOM	9290	CG	ASN	M	142	142.887	-9.119	22.153	1.00	34.06
ATOM	9291	OD1	ASN	M	142	143.554	-9.503	23.147	1.00	31.68
ATOM	9292	ND2	ASN	M	142	141.941	-8.183	22.240	1.00	39.52
ATOM	9293	N	PHE	M	143	140.686	-11.485	18.484	1.00	14.19
ATOM	9294	CA	PHE	M	143	140.493	-11.828	17.083	1.00	10.01
ATOM	9295	C	PHE	M	143	139.461	-10.929	16.471	1.00	7.81
ATOM	9296	O	PHE	M	143	138.896	-10.105	17.164	1.00	13.36
ATOM	9297	CB	PHE	M	143	140.031	-13.289	16.952	1.00	15.60
ATOM	9298	CG	PHE	M	143	138.767	-13.637	17.745	1.00	21.87

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ATOM	9299	CD1	PHE	M	143	138.837	-14.038	19.090	1.00	22.82
ATOM	9300	CD2	PHE	M	143	137.516	-13.638	17.116	1.00	20.60
ATOM	9301	CE1	PHE	M	143	137.693	-14.432	19.766	1.00	18.87
ATOM	9302	CE2	PHE	M	143	136.380	-14.026	17.784	1.00	14.07
ATOM	9303	CZ	PHE	M	143	136.465	-14.424	19.103	1.00	19.59
ATOM	9304	N	TYR	M	144	139.208	-11.098	15.179	1.00	4.00
ATOM	9305	CA	TYR	M	144	138.182	-10.322	14.446	1.00	6.37
ATOM	9306	C	TYR	M	144	138.231	-10.834	13.047	1.00	6.60
ATOM	9307	O	TYR	M	144	139.298	-11.120	12.585	1.00	9.69
ATOM	9308	CB	TYR	M	144	138.454	-8.841	14.439	1.00	6.15
ATOM	9309	CG	TYR	M	144	137.446	-8.088	13.592	1.00	7.38
ATOM	9310	CD1	TYR	M	144	136.579	-7.169	14.168	1.00	6.79
ATOM	9311	CD2	TYR	M	144	137.367	-8.294	12.225	1.00	2.58
ATOM	9312	CE1	TYR	M	144	135.653	-6.468	13.400	1.00	7.48
ATOM	9313	CE2	TYR	M	144	136.454	-7.610	11.449	1.00	10.13
ATOM	9314	CZ	TYR	M	144	135.587	-6.685	12.038	1.00	9.39
ATOM	9315	OH	TYR	M	144	134.659	-5.986	11.271	1.00	7.52
ATOM	9316	N	PRO	M	145	137.086	-10.925	12.324	1.00	10.39
ATOM	9317	CA	PRO	M	145	135.690	-10.734	12.732	1.00	10.43
ATOM	9318	C	PRO	M	145	135.323	-11.644	13.864	1.00	12.75
ATOM	9319	O	PRO	M	145	136.094	-12.529	14.238	1.00	6.63
ATOM	9320	CB	PRO	M	145	134.892	-11.108	11.483	1.00	10.57
ATOM	9321	CG	PRO	M	145	135.866	-11.149	10.343	1.00	7.84
ATOM	9322	CD	PRO	M	145	137.191	-11.430	10.941	1.00	12.16
ATOM	9323	N	ARG	M	146	134.089	-11.484	14.333	1.00	20.41
ATOM	9324	CA	ARG	M	146	133.543	-12.279	15.433	1.00	22.02
ATOM	9325	C	ARG	M	146	133.173	-13.712	15.041	1.00	17.59
ATOM	9326	O	ARG	M	146	132.936	-14.538	15.916	1.00	20.72
ATOM	9327	CB	ARG	M	146	132.323	-11.579	16.035	1.00	21.67
ATOM	9328	CG	ARG	M	146	131.888	-12.149	17.347	1.00	28.02
ATOM	9329	CD	ARG	M	146	130.370	-12.287	17.402	1.00	35.72
ATOM	9330	NE	ARG	M	146	129.884	-12.458	18.770	1.00	40.17
ATOM	9331	CZ	ARG	M	146	130.335	-13.383	19.621	1.00	44.51
ATOM	9332	NH1	ARG	M	146	131.285	-14.249	19.254	1.00	41.76
ATOM	9333	NH2	ARG	M	146	129.828	-13.445	20.849	1.00	43.80
ATOM	9334	N	GLU	M	147	133.108	-14.021	13.752	1.00	10.37
ATOM	9335	CA	GLU	M	147	132.791	-15.393	13.370	1.00	13.73
ATOM	9336	C	GLU	M	147	133.951	-16.328	13.732	1.00	12.40
ATOM	9337	O	GLU	M	147	135.047	-16.144	13.231	1.00	18.33
ATOM	9338	CB	GLU	M	147	132.484	-15.456	11.887	1.00	12.56
ATOM	9339	CG	GLU	M	147	131.202	-14.760	11.538	1.00	30.46
ATOM	9340	CD	GLU	M	147	131.362	-13.261	11.299	1.00	39.67
ATOM	9341	OE1	GLU	M	147	130.565	-12.469	11.886	1.00	44.89
ATOM	9342	OE2	GLU	M	147	132.270	-12.884	10.510	1.00	43.40
ATOM	9343	N	ALA	M	148	133.726	-17.330	14.586	1.00	11.11
ATOM	9344	CA	ALA	M	148	134.820	-18.206	15.018	1.00	9.20
ATOM	9345	C	ALA	M	148	134.442	-19.597	15.491	1.00	11.18
ATOM	9346	O	ALA	M	148	134.071	-19.755	16.655	1.00	19.73
ATOM	9347	CB	ALA	M	148	135.570	-17.514	16.140	1.00	7.19
ATOM	9348	N	LYS	M	149	134.595	-20.615	14.652	1.00	9.92
ATOM	9349	CA	LYS	M	149	134.226	-21.960	15.081	1.00	14.87
ATOM	9350	C	LYS	M	149	135.229	-22.503	16.060	1.00	17.37
ATOM	9351	O	LYS	M	149	136.401	-22.303	15.880	1.00	21.34
ATOM	9352	CB	LYS	M	149	134.133	-22.916	13.909	1.00	15.49
ATOM	9353	CG	LYS	M	149	134.085	-24.363	14.340	1.00	26.92
ATOM	9354	CD	LYS	M	149	133.039	-25.125	13.555	1.00	40.00
ATOM	9355	CE	LYS	M	149	133.677	-26.223	12.677	1.00	46.91
ATOM	9356	NZ	LYS	M	149	134.043	-25.714	11.298	1.00	50.67
ATOM	9357	N	VAL	M	150	134.763	-23.202	17.086	1.00	20.66
ATOM	9358	CA	VAL	M	150	135.630	-23.769	18.106	1.00	23.65

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ATOM	9359	C	VAL	M	150	135.124	-25.145	18.546	1.00	27.66
ATOM	9360	O	VAL	M	150	134.418	-25.219	19.542	1.00	34.45
ATOM	9361	CB	VAL	M	150	135.648	-22.850	19.329	1.00	23.30
ATOM	9362	CG1	VAL	M	150	136.967	-22.922	20.013	1.00	29.89
ATOM	9363	CG2	VAL	M	150	135.404	-21.433	18.897	1.00	26.79
ATOM	9364	N	GLN	M	151	135.481	-26.215	17.824	1.00	28.06
ATOM	9365	CA	GLN	M	151	135.057	-27.598	18.131	1.00	28.40
ATOM	9366	C	GLN	M	151	135.929	-28.218	19.194	1.00	27.91
ATOM	9367	O	GLN	M	151	137.097	-27.896	19.275	1.00	30.24
ATOM	9368	CB	GLN	M	151	135.190	-28.472	16.903	1.00	34.32
ATOM	9369	CG	GLN	M	151	133.912	-29.112	16.385	1.00	44.84
ATOM	9370	CD	GLN	M	151	133.897	-29.225	14.843	1.00	48.95
ATOM	9371	OE1	GLN	M	151	132.858	-29.066	14.189	1.00	53.91
ATOM	9372	NE2	GLN	M	151	135.060	-29.499	14.264	1.00	51.62
ATOM	9373	N	TRP	M	152	135.379	-29.102	20.019	1.00	28.17
ATOM	9374	CA	TRP	M	152	136.182	-29.749	21.070	1.00	27.60
ATOM	9375	C	TRP	M	152	136.383	-31.226	20.771	1.00	30.13
ATOM	9376	O	TRP	M	152	135.479	-31.866	20.245	1.00	29.30
ATOM	9377	CB	TRP	M	152	135.493	-29.624	22.419	1.00	20.07
ATOM	9378	CG	TRP	M	152	135.784	-28.394	23.166	1.00	14.00
ATOM	9379	CD1	TRP	M	152	134.997	-27.294	23.242	1.00	15.77
ATOM	9380	CD2	TRP	M	152	136.877	-28.173	24.060	1.00	14.70
ATOM	9381	NE1	TRP	M	152	135.518	-26.394	24.144	1.00	18.47
ATOM	9382	CE2	TRP	M	152	136.677	-26.904	24.658	1.00	16.77
ATOM	9383	CE3	TRP	M	152	138.002	-28.920	24.423	1.00	10.34
ATOM	9384	CZ2	TRP	M	152	137.555	-26.365	25.589	1.00	17.03
ATOM	9385	CZ3	TRP	M	152	138.871	-28.396	25.351	1.00	17.08
ATOM	9386	CH2	TRP	M	152	138.643	-27.123	25.927	1.00	22.51
ATOM	9387	N	LYS	M	153	137.554	-31.767	21.121	1.00	33.52
ATOM	9388	CA	LYS	M	153	137.849	-33.171	20.857	1.00	34.97
ATOM	9389	C	LYS	M	153	138.562	-33.859	21.999	1.00	37.22
ATOM	9390	O	LYS	M	153	139.678	-33.497	22.352	1.00	39.03
ATOM	9391	CB	LYS	M	153	138.674	-33.297	19.584	1.00	34.72
ATOM	9392	CG	LYS	M	153	137.900	-32.866	18.335	1.00	41.02
ATOM	9393	CD	LYS	M	153	138.545	-33.356	17.031	1.00	46.88
ATOM	9394	CE	LYS	M	153	138.859	-32.197	16.092	1.00	48.42
ATOM	9395	NZ	LYS	M	153	140.284	-31.738	16.205	1.00	49.53
ATOM	9396	N	VAL	M	154	137.883	-34.845	22.584	1.00	39.57
ATOM	9397	CA	VAL	M	154	138.421	-35.621	23.691	1.00	39.97
ATOM	9398	C	VAL	M	154	138.816	-37.008	23.232	1.00	42.85
ATOM	9399	O	VAL	M	154	137.981	-37.780	22.783	1.00	38.28
ATOM	9400	CB	VAL	M	154	137.411	-35.759	24.866	1.00	36.29
ATOM	9401	CG1	VAL	M	154	138.066	-36.480	26.046	1.00	33.24
ATOM	9402	CG2	VAL	M	154	136.971	-34.399	25.329	1.00	36.45
ATOM	9403	N	ASP	M	155	140.109	-37.304	23.372	1.00	49.75
ATOM	9404	CA	ASP	M	155	140.691	-38.584	22.987	1.00	52.83
ATOM	9405	C	ASP	M	155	140.224	-38.923	21.589	1.00	53.05
ATOM	9406	O	ASP	M	155	139.749	-40.016	21.324	1.00	50.77
ATOM	9407	CB	ASP	M	155	140.303	-39.676	23.991	1.00	53.00
ATOM	9408	CG	ASP	M	155	141.210	-39.680	25.228	1.00	58.97
ATOM	9409	OD1	ASP	M	155	142.032	-38.739	25.397	1.00	55.58
ATOM	9410	OD2	ASP	M	155	141.098	-40.635	26.034	1.00	64.88
ATOM	9411	N	ASN	M	156	140.367	-37.941	20.701	1.00	56.47
ATOM	9412	CA	ASN	M	156	139.982	-38.075	19.302	1.00	60.05
ATOM	9413	C	ASN	M	156	138.477	-38.079	19.161	1.00	60.21
ATOM	9414	O	ASN	M	156	137.959	-37.962	18.054	1.00	61.65
ATOM	9415	CB	ASN	M	156	140.556	-39.352	18.691	1.00	66.64
ATOM	9416	CG	ASN	M	156	142.041	-39.539	19.005	1.00	77.81
ATOM	9417	OD1	ASN	M	156	142.811	-38.560	19.091	1.00	79.55
ATOM	9418	ND2	ASN	M	156	142.455	-40.806	19.176	1.00	80.57

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ATOM	9419	N	ALA	M	157	137.778	-38.202	20.285	1.00	58.44
ATOM	9420	CA	ALA	M	157	136.321	-38.209	20.275	1.00	56.57
ATOM	9421	C	ALA	M	157	135.794	-36.787	20.128	1.00	54.92
ATOM	9422	O	ALA	M	157	135.756	-36.038	21.096	1.00	55.74
ATOM	9423	CB	ALA	M	157	135.803	-38.822	21.560	1.00	58.31
ATOM	9424	N	LEU	M	158	135.376	-36.412	18.929	1.00	53.69
ATOM	9425	CA	LEU	M	158	134.875	-35.056	18.714	1.00	54.04
ATOM	9426	C	LEU	M	158	133.720	-34.709	19.632	1.00	51.51
ATOM	9427	O	LEU	M	158	132.588	-35.105	19.391	1.00	48.87
ATOM	9428	CB	LEU	M	158	134.417	-34.862	17.264	1.00	56.55
ATOM	9429	CG	LEU	M	158	133.711	-33.561	16.827	1.00	57.88
ATOM	9430	CD1	LEU	M	158	132.230	-33.775	16.880	1.00	57.05
ATOM	9431	CD2	LEU	M	158	134.097	-32.379	17.696	1.00	59.47
ATOM	9432	N	GLN	M	159	134.017	-33.945	20.672	1.00	51.22
ATOM	9433	CA	GLN	M	159	133.006	-33.501	21.619	1.00	51.90
ATOM	9434	C	GLN	M	159	131.856	-32.947	20.801	1.00	52.22
ATOM	9435	O	GLN	M	159	132.037	-32.644	19.619	1.00	53.17
ATOM	9436	CB	GLN	M	159	133.568	-32.376	22.484	1.00	54.86
ATOM	9437	CG	GLN	M	159	134.429	-32.839	23.597	1.00	55.69
ATOM	9438	CD	GLN	M	159	133.768	-33.938	24.343	1.00	56.81
ATOM	9439	OE1	GLN	M	159	133.563	-35.029	23.810	1.00	58.01
ATOM	9440	NE2	GLN	M	159	133.407	-33.665	25.581	1.00	58.89
ATOM	9441	N	SER	M	160	130.691	-32.792	21.431	1.00	50.94
ATOM	9442	CA	SER	M	160	129.501	-32.259	20.758	1.00	49.90
ATOM	9443	C	SER	M	160	128.349	-32.162	21.719	1.00	45.97
ATOM	9444	O	SER	M	160	127.341	-31.535	21.441	1.00	44.20
ATOM	9445	CB	SER	M	160	129.075	-33.147	19.592	1.00	55.27
ATOM	9446	OG	SER	M	160	127.762	-32.817	19.166	1.00	57.79
ATOM	9447	N	GLY	M	161	128.504	-32.798	22.861	1.00	46.27
ATOM	9448	CA	GLY	M	161	127.453	-32.742	23.843	1.00	46.29
ATOM	9449	C	GLY	M	161	127.504	-31.376	24.482	1.00	46.65
ATOM	9450	O	GLY	M	161	126.819	-30.443	24.028	1.00	43.61
ATOM	9451	N	ASN	M	162	128.358	-31.220	25.493	1.00	46.54
ATOM	9452	CA	ASN	M	162	128.347	-29.952	26.167	1.00	50.33
ATOM	9453	C	ASN	M	162	129.625	-29.224	26.442	1.00	48.83
ATOM	9454	O	ASN	M	162	130.536	-29.742	27.085	1.00	49.43
ATOM	9455	CB	ASN	M	162	127.556	-30.075	27.480	1.00	57.25
ATOM	9456	CG	ASN	M	162	126.021	-30.071	27.267	1.00	60.30
ATOM	9457	OD1	ASN	M	162	125.517	-29.922	26.137	1.00	60.25
ATOM	9458	ND2	ASN	M	162	125.280	-30.237	28.366	1.00	60.56
ATOM	9459	N	SER	M	163	129.593	-27.972	25.981	1.00	46.85
ATOM	9460	CA	SER	M	163	130.634	-26.962	26.085	1.00	40.01
ATOM	9461	C	SER	M	163	129.919	-25.602	25.974	1.00	34.75
ATOM	9462	O	SER	M	163	128.920	-25.454	25.274	1.00	23.93
ATOM	9463	CB	SER	M	163	131.629	-27.105	24.940	1.00	41.70
ATOM	9464	OG	SER	M	163	130.943	-27.280	23.717	1.00	38.35
ATOM	9465	N	GLN	M	164	130.459	-24.600	26.650	1.00	34.48
ATOM	9466	CA	GLN	M	164	129.844	-23.288	26.646	1.00	31.49
ATOM	9467	C	GLN	M	164	130.802	-22.157	26.233	1.00	28.42
ATOM	9468	O	GLN	M	164	131.862	-21.975	26.829	1.00	31.76
ATOM	9469	CB	GLN	M	164	129.288	-23.009	28.047	1.00	33.80
ATOM	9470	CG	GLN	M	164	127.880	-23.526	28.276	1.00	37.49
ATOM	9471	CD	GLN	M	164	127.291	-23.110	29.637	1.00	40.11
ATOM	9472	OE1	GLN	M	164	127.983	-22.559	30.512	1.00	41.09
ATOM	9473	NE2	GLN	M	164	126.002	-23.375	29.813	1.00	38.32
ATOM	9474	N	GLU	M	165	130.411	-21.402	25.214	1.00	23.43
ATOM	9475	CA	GLU	M	165	131.174	-20.258	24.707	1.00	22.31
ATOM	9476	C	GLU	M	165	130.669	-18.940	25.307	1.00	18.99
ATOM	9477	O	GLU	M	165	129.512	-18.819	25.599	1.00	22.94
ATOM	9478	CB	GLU	M	165	130.987	-20.123	23.203	1.00	23.03

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ATOM	9479	CG	GLU	M	165	131.703	-21.155	22.321	1.00	30.58
ATOM	9480	CD	GLU	M	165	131.759	-20.716	20.829	1.00	35.19
ATOM	9481	OE1	GLU	M	165	131.292	-19.593	20.496	1.00	30.68
ATOM	9482	OE2	GLU	M	165	132.271	-21.494	19.985	1.00	35.86
ATOM	9483	N	SER	M	166	131.529	-17.948	25.469	1.00	17.29
ATOM	9484	CA	SER	M	166	131.127	-16.627	25.975	1.00	10.33
ATOM	9485	C	SER	M	166	132.044	-15.665	25.181	1.00	11.56
ATOM	9486	O	SER	M	166	133.183	-15.997	24.821	1.00	12.26
ATOM	9487	CB	SER	M	166	131.379	-16.510	27.485	1.00	7.89
ATOM	9488	OG	SER	M	166	131.355	-15.154	27.907	1.00	4.76
ATOM	9489	N	VAL	M	167	131.570	-14.482	24.875	1.00	4.23
ATOM	9490	CA	VAL	M	167	132.407	-13.590	24.091	1.00	7.12
ATOM	9491	C	VAL	M	167	132.480	-12.204	24.675	1.00	7.67
ATOM	9492	O	VAL	M	167	131.745	-11.904	25.586	1.00	19.37
ATOM	9493	CB	VAL	M	167	131.831	-13.529	22.698	1.00	5.41
ATOM	9494	CG1	VAL	M	167	132.541	-12.479	21.816	1.00	6.79
ATOM	9495	CG2	VAL	M	167	131.912	-14.890	22.132	1.00	7.41
ATOM	9496	N	THR	M	168	133.344	-11.350	24.152	1.00	4.02
ATOM	9497	CA	THR	M	168	133.455	-9.995	24.660	1.00	5.12
ATOM	9498	C	THR	M	168	133.125	-9.002	23.581	1.00	5.44
ATOM	9499	O	THR	M	168	133.210	-9.314	22.407	1.00	4.45
ATOM	9500	CB	THR	M	168	134.857	-9.722	25.140	1.00	7.58
ATOM	9501	OG1	THR	M	168	135.772	-10.012	24.074	1.00	8.11
ATOM	9502	CG2	THR	M	168	135.193	-10.620	26.342	1.00	10.06
ATOM	9503	N	GLU	M	169	132.723	-7.807	23.981	1.00	11.31
ATOM	9504	CA	GLU	M	169	132.366	-6.788	23.001	1.00	16.15
ATOM	9505	C	GLU	M	169	133.677	-6.308	22.393	1.00	14.60
ATOM	9506	O	GLU	M	169	134.719	-6.412	23.035	1.00	16.72
ATOM	9507	CB	GLU	M	169	131.618	-5.619	23.692	1.00	22.92
ATOM	9508	CG	GLU	M	169	130.144	-5.405	23.272	1.00	28.99
ATOM	9509	CD	GLU	M	169	129.377	-6.719	23.165	1.00	35.09
ATOM	9510	OE1	GLU	M	169	129.764	-7.714	23.813	1.00	35.42
ATOM	9511	OE2	GLU	M	169	128.378	-6.778	22.427	1.00	40.79
ATOM	9512	N	GLN	M	170	133.637	-5.781	21.173	1.00	12.61
ATOM	9513	CA	GLN	M	170	134.859	-5.274	20.530	1.00	11.51
ATOM	9514	C	GLN	M	170	135.706	-4.517	21.539	1.00	13.05
ATOM	9515	O	GLN	M	170	135.191	-3.675	22.274	1.00	9.18
ATOM	9516	CB	GLN	M	170	134.518	-4.329	19.393	1.00	3.97
ATOM	9517	CG	GLN	M	170	133.645	-4.956	18.395	1.00	6.71
ATOM	9518	CD	GLN	M	170	133.668	-4.215	17.110	1.00	13.10
ATOM	9519	OE1	GLN	M	170	134.447	-4.553	16.226	1.00	19.58
ATOM	9520	NE2	GLN	M	170	132.817	-3.192	16.981	1.00	4.34
ATOM	9521	N	ASP	M	171	137.002	-4.814	21.554	1.00	19.98
ATOM	9522	CA	ASP	M	171	137.923	-4.175	22.482	1.00	27.32
ATOM	9523	C	ASP	M	171	137.958	-2.668	22.306	1.00	27.42
ATOM	9524	O	ASP	M	171	137.844	-2.135	21.199	1.00	28.17
ATOM	9525	CB	ASP	M	171	139.331	-4.750	22.333	1.00	35.15
ATOM	9526	CG	ASP	M	171	140.228	-4.441	23.544	1.00	46.43
ATOM	9527	OD1	ASP	M	171	139.750	-3.828	24.532	1.00	52.36
ATOM	9528	OD2	ASP	M	171	141.428	-4.810	23.517	1.00	55.83
ATOM	9529	N	SER	M	172	138.081	-1.975	23.422	1.00	25.66
ATOM	9530	CA	SER	M	172	138.106	-0.540	23.380	1.00	29.14
ATOM	9531	C	SER	M	172	139.391	-0.030	22.799	1.00	30.51
ATOM	9532	O	SER	M	172	139.498	1.141	22.446	1.00	31.34
ATOM	9533	CB	SER	M	172	137.933	0.007	24.780	1.00	32.15
ATOM	9534	OG	SER	M	172	139.077	-0.255	25.560	1.00	35.73
ATOM	9535	N	LYS	M	173	140.371	-0.927	22.715	1.00	36.03
ATOM	9536	CA	LYS	M	173	141.703	-0.597	22.198	1.00	34.19
ATOM	9537	C	LYS	M	173	141.889	-1.013	20.743	1.00	31.50
ATOM	9538	O	LYS	M	173	142.077	-0.157	19.882	1.00	31.87

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ATOM	9539	CB	LYS	M	173	142.783	-1.257	23.060	1.00	37.25
ATOM	9540	CG	LYS	M	173	143.378	-0.330	24.101	1.00	44.75
ATOM	9541	CD	LYS	M	173	144.401	-1.079	24.965	1.00	56.73
ATOM	9542	CE	LYS	M	173	143.831	-1.481	26.342	1.00	63.12
ATOM	9543	NZ	LYS	M	173	144.170	-2.888	26.777	1.00	65.82
ATOM	9544	N	ASP	M	174	141.799	-2.315	20.471	1.00	24.64
ATOM	9545	CA	ASP	M	174	141.983	-2.827	19.120	1.00	21.74
ATOM	9546	C	ASP	M	174	140.697	-3.197	18.394	1.00	22.53
ATOM	9547	O	ASP	M	174	140.751	-3.735	17.289	1.00	25.08
ATOM	9548	CB	ASP	M	174	142.879	-4.078	19.158	1.00	22.47
ATOM	9549	CG	ASP	M	174	142.333	-5.177	20.095	1.00	23.24
ATOM	9550	OD1	ASP	M	174	141.097	-5.276	20.253	1.00	23.32
ATOM	9551	OD2	ASP	M	174	143.127	-5.954	20.676	1.00	20.19
ATOM	9552	N	SER	M	175	139.547	-2.970	19.020	1.00	19.94
ATOM	9553	CA	SER	M	175	138.274	-3.334	18.406	1.00	14.71
ATOM	9554	C	SER	M	175	138.301	-4.771	17.961	1.00	13.71
ATOM	9555	O	SER	M	175	137.962	-5.069	16.816	1.00	11.30
ATOM	9556	CB	SER	M	175	137.978	-2.458	17.214	1.00	8.39
ATOM	9557	OG	SER	M	175	138.188	-1.135	17.635	1.00	14.74
ATOM	9558	N	THR	M	176	138.689	-5.658	18.872	1.00	11.89
ATOM	9559	CA	THR	M	176	138.758	-7.075	18.553	1.00	18.39
ATOM	9560	C	THR	M	176	138.096	-7.971	19.601	1.00	19.28
ATOM	9561	O	THR	M	176	138.107	-7.663	20.798	1.00	25.63
ATOM	9562	CB	THR	M	176	140.230	-7.543	18.385	1.00	18.36
ATOM	9563	OG1	THR	M	176	140.910	-7.453	19.643	1.00	17.31
ATOM	9564	CG2	THR	M	176	140.937	-6.697	17.354	1.00	15.79
ATOM	9565	N	TYR	M	177	137.561	-9.100	19.154	1.00	14.18
ATOM	9566	CA	TYR	M	177	136.918	-10.043	20.050	1.00	14.20
ATOM	9567	C	TYR	M	177	137.864	-10.967	20.818	1.00	17.63
ATOM	9568	O	TYR	M	177	139.065	-10.950	20.620	1.00	22.57
ATOM	9569	CB	TYR	M	177	135.947	-10.874	19.248	1.00	10.81
ATOM	9570	CG	TYR	M	177	134.875	-10.007	18.666	1.00	10.94
ATOM	9571	CD1	TYR	M	177	134.073	-9.220	19.495	1.00	3.44
ATOM	9572	CD2	TYR	M	177	134.745	-9.867	17.280	1.00	12.82
ATOM	9573	CE1	TYR	M	177	133.197	-8.311	18.967	1.00	2.47
ATOM	9574	CE2	TYR	M	177	133.864	-8.958	16.738	1.00	7.52
ATOM	9575	CZ	TYR	M	177	133.103	-8.174	17.579	1.00	4.76
ATOM	9576	OH	TYR	M	177	132.338	-7.187	16.995	1.00	5.71
ATOM	9577	N	SER	M	178	137.300	-11.737	21.738	1.00	18.31
ATOM	9578	CA	SER	M	178	138.027	-12.721	22.525	1.00	16.28
ATOM	9579	C	SER	M	178	136.873	-13.572	23.006	1.00	17.67
ATOM	9580	O	SER	M	178	135.969	-13.077	23.669	1.00	21.84
ATOM	9581	CB	SER	M	178	138.716	-12.088	23.735	1.00	15.41
ATOM	9582	OG	SER	M	178	139.715	-11.168	23.344	1.00	11.31
ATOM	9583	N	LEU	M	179	136.896	-14.842	22.661	1.00	15.99
ATOM	9584	CA	LEU	M	179	135.854	-15.769	23.040	1.00	19.45
ATOM	9585	C	LEU	M	179	136.437	-16.797	24.039	1.00	24.97
ATOM	9586	O	LEU	M	179	137.650	-16.995	24.089	1.00	27.28
ATOM	9587	CB	LEU	M	179	135.356	-16.437	21.760	1.00	11.36
ATOM	9588	CG	LEU	M	179	134.523	-17.721	21.746	1.00	12.04
ATOM	9589	CD1	LEU	M	179	134.325	-18.115	20.317	1.00	2.46
ATOM	9590	CD2	LEU	M	179	135.196	-18.872	22.488	1.00	14.86
ATOM	9591	N	SER	M	180	135.583	-17.438	24.842	1.00	26.36
ATOM	9592	CA	SER	M	180	136.065	-18.425	25.784	1.00	25.81
ATOM	9593	C	SER	M	180	135.184	-19.660	25.764	1.00	27.65
ATOM	9594	O	SER	M	180	134.099	-19.641	26.330	1.00	35.37
ATOM	9595	CB	SER	M	180	136.111	-17.807	27.192	1.00	26.97
ATOM	9596	OG	SER	M	180	134.821	-17.548	27.744	1.00	22.80
ATOM	9597	N	SER	M	181	135.633	-20.726	25.108	1.00	24.59
ATOM	9598	CA	SER	M	181	134.871	-21.971	25.076	1.00	25.09

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ATOM	9599	C	SER	M	181	135.279	-22.867	26.234	1.00	26.27
ATOM	9600	O	SER	M	181	136.447	-23.238	26.328	1.00	30.16
ATOM	9601	CB	SER	M	181	135.133	-22.746	23.807	1.00	27.81
ATOM	9602	OG	SER	M	181	134.583	-24.045	23.953	1.00	29.97
ATOM	9603	N	THR	M	182	134.325	-23.270	27.076	1.00	25.17
ATOM	9604	CA	THR	M	182	134.664	-24.088	28.225	1.00	22.65
ATOM	9605	C	THR	M	182	134.135	-25.482	28.278	1.00	23.72
ATOM	9606	O	THR	M	182	133.039	-25.657	28.761	1.00	28.97
ATOM	9607	CB	THR	M	182	134.212	-23.449	29.508	1.00	15.36
ATOM	9608	OG1	THR	M	182	134.513	-22.041	29.476	1.00	17.88
ATOM	9609	CG2	THR	M	182	134.888	-24.163	30.684	1.00	9.59
ATOM	9610	N	LEU	M	183	134.902	-26.477	27.815	1.00	24.97
ATOM	9611	CA	LEU	M	183	134.444	-27.866	27.881	1.00	20.81
ATOM	9612	C	LEU	M	183	134.384	-28.202	29.360	1.00	27.01
ATOM	9613	O	LEU	M	183	135.208	-27.737	30.145	1.00	27.66
ATOM	9614	CB	LEU	M	183	135.416	-28.812	27.204	1.00	12.43
ATOM	9615	CG	LEU	M	183	134.911	-30.252	27.250	1.00	12.34
ATOM	9616	CD1	LEU	M	183	134.521	-30.631	25.848	1.00	13.92
ATOM	9617	CD2	LEU	M	183	135.950	-31.234	27.791	1.00	9.56
ATOM	9618	N	THR	M	184	133.418	-29.022	29.749	1.00	33.22
ATOM	9619	CA	THR	M	184	133.276	-29.368	31.158	1.00	38.19
ATOM	9620	C	THR	M	184	132.870	-30.853	31.379	1.00	42.30
ATOM	9621	O	THR	M	184	131.748	-31.269	31.056	1.00	41.80
ATOM	9622	CB	THR	M	184	132.265	-28.402	31.820	1.00	34.19
ATOM	9623	OG1	THR	M	184	132.284	-28.577	33.231	1.00	32.45
ATOM	9624	CG2	THR	M	184	130.891	-28.675	31.345	1.00	33.98
ATOM	9625	N	LEU	M	185	133.814	-31.641	31.903	1.00	42.22
ATOM	9626	CA	LEU	M	185	133.611	-33.059	32.180	1.00	42.12
ATOM	9627	C	LEU	M	185	133.543	-33.358	33.666	1.00	45.05
ATOM	9628	O	LEU	M	185	133.856	-32.514	34.489	1.00	50.01
ATOM	9629	CB	LEU	M	185	134.763	-33.848	31.594	1.00	43.37
ATOM	9630	CG	LEU	M	185	134.982	-33.714	30.094	1.00	44.00
ATOM	9631	CD1	LEU	M	185	135.872	-34.873	29.614	1.00	44.17
ATOM	9632	CD2	LEU	M	185	133.639	-33.699	29.388	1.00	45.12
ATOM	9633	N	SER	M	186	133.154	-34.572	34.017	1.00	47.03
ATOM	9634	CA	SER	M	186	133.072	-34.949	35.420	1.00	50.48
ATOM	9635	C	SER	M	186	134.446	-35.450	35.780	1.00	53.85
ATOM	9636	O	SER	M	186	135.044	-36.199	34.995	1.00	54.71
ATOM	9637	CB	SER	M	186	132.095	-36.081	35.584	1.00	51.47
ATOM	9638	OG	SER	M	186	132.593	-37.174	34.844	1.00	54.63
ATOM	9639	N	LYS	M	187	134.940	-35.053	36.952	1.00	55.22
ATOM	9640	CA	LYS	M	187	136.272	-35.468	37.406	1.00	55.10
ATOM	9641	C	LYS	M	187	136.516	-36.855	36.907	1.00	52.46
ATOM	9642	O	LYS	M	187	137.623	-37.193	36.519	1.00	51.87
ATOM	9643	CB	LYS	M	187	136.376	-35.474	38.932	1.00	57.66
ATOM	9644	CG	LYS	M	187	137.764	-35.803	39.458	1.00	58.46
ATOM	9645	CD	LYS	M	187	137.923	-37.289	39.706	1.00	61.95
ATOM	9646	CE	LYS	M	187	138.399	-37.570	41.126	1.00	65.03
ATOM	9647	NZ	LYS	M	187	139.183	-36.443	41.695	1.00	68.62
ATOM	9648	N	ALA	M	188	135.459	-37.652	36.929	1.00	51.25
ATOM	9649	CA	ALA	M	188	135.522	-39.014	36.458	1.00	55.30
ATOM	9650	C	ALA	M	188	135.904	-39.007	35.000	1.00	57.26
ATOM	9651	O	ALA	M	188	137.040	-39.319	34.634	1.00	62.27
ATOM	9652	CB	ALA	M	188	134.194	-39.678	36.616	1.00	56.00
ATOM	9653	N	ASP	M	189	134.946	-38.649	34.163	1.00	56.49
ATOM	9654	CA	ASP	M	189	135.188	-38.601	32.737	1.00	57.61
ATOM	9655	C	ASP	M	189	136.533	-37.979	32.391	1.00	56.88
ATOM	9656	O	ASP	M	189	137.249	-38.471	31.517	1.00	54.35
ATOM	9657	CB	ASP	M	189	134.088	-37.818	32.061	1.00	62.53
ATOM	9658	CG	ASP	M	189	132.900	-38.666	31.764	1.00	67.50

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ATOM	9659	OD1	ASP	M	189	132.352	-39.238	32.729	1.00	72.14
ATOM	9660	OD2	ASP	M	189	132.518	-38.769	30.579	1.00	71.10
ATOM	9661	N	TYR	M	190	136.886	-36.898	33.074	1.00	55.19
ATOM	9662	CA	TYR	M	190	138.150	-36.256	32.790	1.00	55.49
ATOM	9663	C	TYR	M	190	139.292	-37.234	33.040	1.00	56.32
ATOM	9664	O	TYR	M	190	140.072	-37.515	32.139	1.00	57.39
ATOM	9665	CB	TYR	M	190	138.321	-35.025	33.656	1.00	55.73
ATOM	9666	CG	TYR	M	190	139.589	-34.272	33.343	1.00	54.81
ATOM	9667	CD1	TYR	M	190	139.914	-33.930	32.028	1.00	50.42
ATOM	9668	CD2	TYR	M	190	140.500	-33.958	34.353	1.00	54.70
ATOM	9669	CE1	TYR	M	190	141.122	-33.296	31.722	1.00	49.33
ATOM	9670	CE2	TYR	M	190	141.709	-33.325	34.062	1.00	53.56
ATOM	9671	CZ	TYR	M	190	142.013	-33.000	32.744	1.00	51.29
ATOM	9672	OH	TYR	M	190	143.211	-32.382	32.469	1.00	51.86
ATOM	9673	N	GLU	M	191	139.383	-37.762	34.254	1.00	57.56
ATOM	9674	CA	GLU	M	191	140.426	-38.728	34.598	1.00	60.32
ATOM	9675	C	GLU	M	191	140.363	-39.966	33.676	1.00	58.84
ATOM	9676	O	GLU	M	191	141.288	-40.777	33.613	1.00	57.92
ATOM	9677	CB	GLU	M	191	140.263	-39.149	36.065	1.00	64.01
ATOM	9678	CG	GLU	M	191	141.263	-38.481	37.011	1.00	74.63
ATOM	9679	CD	GLU	M	191	140.727	-38.264	38.436	1.00	78.70
ATOM	9680	OE1	GLU	M	191	140.846	-37.130	38.969	1.00	78.91
ATOM	9681	OE2	GLU	M	191	140.195	-39.234	39.024	1.00	83.51
ATOM	9682	N	LYS	M	192	139.265	-40.099	32.951	1.00	57.37
ATOM	9683	CA	LYS	M	192	139.082	-41.225	32.049	1.00	59.06
ATOM	9684	C	LYS	M	192	139.783	-41.101	30.688	1.00	59.57
ATOM	9685	O	LYS	M	192	139.879	-42.088	29.949	1.00	58.40
ATOM	9686	CB	LYS	M	192	137.585	-41.439	31.812	1.00	63.86
ATOM	9687	CG	LYS	M	192	137.067	-40.941	30.436	1.00	67.85
ATOM	9688	CD	LYS	M	192	135.517	-40.985	30.313	1.00	69.01
ATOM	9689	CE	LYS	M	192	134.917	-39.770	29.576	1.00	65.11
ATOM	9690	NZ	LYS	M	192	134.031	-40.166	28.425	1.00	61.83
ATOM	9691	N	HIS	M	193	140.255	-39.902	30.344	1.00	58.54
ATOM	9692	CA	HIS	M	193	140.892	-39.711	29.047	1.00	53.25
ATOM	9693	C	HIS	M	193	142.283	-39.106	29.015	1.00	50.27
ATOM	9694	O	HIS	M	193	142.763	-38.556	30.004	1.00	46.45
ATOM	9695	CB	HIS	M	193	139.952	-38.906	28.179	1.00	55.17
ATOM	9696	CG	HIS	M	193	138.735	-39.674	27.770	1.00	57.79
ATOM	9697	ND1	HIS	M	193	138.806	-40.946	27.242	1.00	60.63
ATOM	9698	CD2	HIS	M	193	137.425	-39.354	27.811	1.00	57.57
ATOM	9699	CE1	HIS	M	193	137.589	-41.380	26.979	1.00	58.76
ATOM	9700	NE2	HIS	M	193	136.729	-40.433	27.316	1.00	57.83
ATOM	9701	N	LYS	M	194	142.920	-39.207	27.854	1.00	46.93
ATOM	9702	CA	LYS	M	194	144.271	-38.708	27.704	1.00	45.41
ATOM	9703	C	LYS	M	194	144.411	-37.329	27.132	1.00	41.47
ATOM	9704	O	LYS	M	194	144.960	-36.434	27.775	1.00	39.88
ATOM	9705	CB	LYS	M	194	145.095	-39.663	26.838	1.00	51.56
ATOM	9706	CG	LYS	M	194	146.519	-39.173	26.554	1.00	57.40
ATOM	9707	CD	LYS	M	194	147.555	-39.862	27.454	1.00	64.15
ATOM	9708	CE	LYS	M	194	147.110	-40.002	28.925	1.00	66.72
ATOM	9709	NZ	LYS	M	194	146.451	-41.331	29.197	1.00	65.65
ATOM	9710	N	VAL	M	195	143.958	-37.170	25.899	1.00	36.65
ATOM	9711	CA	VAL	M	195	144.100	-35.897	25.229	1.00	36.73
ATOM	9712	C	VAL	M	195	142.819	-35.108	25.002	1.00	35.82
ATOM	9713	O	VAL	M	195	141.876	-35.588	24.392	1.00	33.43
ATOM	9714	CB	VAL	M	195	144.857	-36.077	23.854	1.00	36.49
ATOM	9715	CG1	VAL	M	195	145.489	-37.459	23.755	1.00	32.04
ATOM	9716	CG2	VAL	M	195	143.902	-35.901	22.688	1.00	37.97
ATOM	9717	N	TYR	M	196	142.824	-33.871	25.482	1.00	35.84
ATOM	9718	CA	TYR	M	196	141.693	-32.962	25.355	1.00	32.75



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ATOM	9719	C	TYR	M	196	142.158	-31.885	24.385	1.00	31.88
ATOM	9720	O	TYR	M	196	143.275	-31.385	24.501	1.00	34.33
ATOM	9721	CB	TYR	M	196	141.387	-32.354	26.721	1.00	33.56
ATOM	9722	CG	TYR	M	196	140.797	-33.344	27.664	1.00	34.02
ATOM	9723	CD1	TYR	M	196	139.430	-33.541	27.689	1.00	40.66
ATOM	9724	CD2	TYR	M	196	141.599	-34.162	28.460	1.00	36.32
ATOM	9725	CE1	TYR	M	196	138.852	-34.534	28.475	1.00	44.15
ATOM	9726	CE2	TYR	M	196	141.035	-35.169	29.260	1.00	41.15
ATOM	9727	CZ	TYR	M	196	139.648	-35.347	29.257	1.00	44.17
ATOM	9728	OH	TYR	M	196	139.040	-36.315	30.027	1.00	44.30
ATOM	9729	N	ALA	M	197	141.320	-31.523	23.426	1.00	29.79
ATOM	9730	CA	ALA	M	197	141.736	-30.527	22.444	1.00	28.69
ATOM	9731	C	ALA	M	197	140.651	-29.650	21.816	1.00	26.48
ATOM	9732	O	ALA	M	197	139.661	-30.122	21.261	1.00	23.73
ATOM	9733	CB	ALA	M	197	142.548	-31.228	21.328	1.00	27.56
ATOM	9734	N	CYS	M	198	140.863	-28.352	21.900	1.00	25.67
ATOM	9735	CA	CYS	M	198	139.929	-27.425	21.324	1.00	26.85
ATOM	9736	C	CYS	M	198	140.521	-27.016	19.986	1.00	23.72
ATOM	9737	O	CYS	M	198	141.658	-26.593	19.903	1.00	20.48
ATOM	9738	CB	CYS	M	198	139.714	-26.214	22.278	1.00	29.94
ATOM	9739	SG	CYS	M	198	140.637	-24.680	21.900	1.00	34.11
ATOM	9740	N	GLU	M	199	139.725	-27.155	18.942	1.00	23.97
ATOM	9741	CA	GLU	M	199	140.121	-26.817	17.590	1.00	23.73
ATOM	9742	C	GLU	M	199	139.292	-25.585	17.051	1.00	20.94
ATOM	9743	O	GLU	M	199	138.065	-25.621	16.939	1.00	17.54
ATOM	9744	CB	GLU	M	199	139.952	-28.087	16.737	1.00	27.07
ATOM	9745	CG	GLU	M	199	140.312	-27.944	15.260	1.00	42.17
ATOM	9746	CD	GLU	M	199	139.552	-28.920	14.353	1.00	49.07
ATOM	9747	OE1	GLU	M	199	138.450	-29.361	14.761	1.00	51.33
ATOM	9748	OE2	GLU	M	199	140.053	-29.239	13.240	1.00	47.57
ATOM	9749	N	VAL	M	200	139.979	-24.494	16.716	1.00	16.41
ATOM	9750	CA	VAL	M	200	139.319	-23.283	16.238	1.00	10.32
ATOM	9751	C	VAL	M	200	139.543	-22.979	14.787	1.00	10.03
ATOM	9752	O	VAL	M	200	140.643	-23.093	14.331	1.00	9.57
ATOM	9753	CB	VAL	M	200	139.775	-22.055	16.997	1.00	10.43
ATOM	9754	CG1	VAL	M	200	141.075	-22.303	17.685	1.00	7.21
ATOM	9755	CG2	VAL	M	200	139.856	-20.889	16.048	1.00	7.93
ATOM	9756	N	THR	M	201	138.489	-22.561	14.087	1.00	12.21
ATOM	9757	CA	THR	M	201	138.523	-22.235	12.656	1.00	11.62
ATOM	9758	C	THR	M	201	138.139	-20.809	12.637	1.00	8.83
ATOM	9759	O	THR	M	201	137.272	-20.478	13.389	1.00	11.99
ATOM	9760	CB	THR	M	201	137.449	-22.989	11.917	1.00	14.04
ATOM	9761	OG1	THR	M	201	136.963	-24.028	12.773	1.00	30.54
ATOM	9762	CG2	THR	M	201	137.991	-23.650	10.696	1.00	16.53
ATOM	9763	N	HIS	M	202	138.787	-19.991	11.798	1.00	13.16
ATOM	9764	CA	HIS	M	202	138.553	-18.539	11.700	1.00	11.84
ATOM	9765	C	HIS	M	202	139.347	-17.846	10.565	1.00	8.25
ATOM	9766	O	HIS	M	202	140.551	-17.994	10.462	1.00	11.44
ATOM	9767	CB	HIS	M	202	138.929	-17.871	13.027	1.00	8.23
ATOM	9768	CG	HIS	M	202	138.835	-16.380	13.001	1.00	16.96
ATOM	9769	ND1	HIS	M	202	139.522	-15.603	12.091	1.00	17.13
ATOM	9770	CD2	HIS	M	202	138.164	-15.514	13.796	1.00	22.44
ATOM	9771	CE1	HIS	M	202	139.279	-14.325	12.325	1.00	16.56
ATOM	9772	NE2	HIS	M	202	138.456	-14.244	13.352	1.00	24.96
ATOM	9773	N	GLN	M	203	138.657	-17.057	9.757	1.00	7.43
ATOM	9774	CA	GLN	M	203	139.222	-16.312	8.627	1.00	5.01
ATOM	9775	C	GLN	M	203	140.686	-15.992	8.743	1.00	8.12
ATOM	9776	O	GLN	M	203	141.449	-16.205	7.814	1.00	11.13
ATOM	9777	CB	GLN	M	203	138.511	-14.984	8.487	1.00	2.00
ATOM	9778	CG	GLN	M	203	138.382	-14.464	7.133	1.00	2.00

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ATOM	9779	CD	GLN	M	203	137.674	-13.151	7.144	1.00	8.87
ATOM	9780	OE1	GLN	M	203	138.239	-12.114	6.810	1.00	13.14
ATOM	9781	NE2	GLN	M	203	136.408	-13.182	7.539	1.00	23.13
ATOM	9782	N	GLY	M	204	141.068	-15.420	9.870	1.00	10.25
ATOM	9783	CA	GLY	M	204	142.461	-15.050	10.051	1.00	12.47
ATOM	9784	C	GLY	M	204	143.329	-16.259	9.839	1.00	11.26
ATOM	9785	O	GLY	M	204	144.146	-16.305	8.932	1.00	16.36
ATOM	9786	N	LEU	M	205	143.136	-17.257	10.680	1.00	11.11
ATOM	9787	CA	LEU	M	205	143.900	-18.476	10.572	1.00	13.66
ATOM	9788	C	LEU	M	205	143.918	-18.973	9.151	1.00	15.61
ATOM	9789	O	LEU	M	205	142.875	-19.142	8.536	1.00	16.97
ATOM	9790	CB	LEU	M	205	143.312	-19.570	11.467	1.00	9.88
ATOM	9791	CG	LEU	M	205	143.778	-19.492	12.928	1.00	10.92
ATOM	9792	CD1	LEU	M	205	143.885	-18.020	13.353	1.00	4.73
ATOM	9793	CD2	LEU	M	205	142.837	-20.294	13.852	1.00	10.57
ATOM	9794	N	SER	M	206	145.117	-19.186	8.625	1.00	22.67
ATOM	9795	CA	SER	M	206	145.253	-19.745	7.287	1.00	23.42
ATOM	9796	C	SER	M	206	144.599	-21.139	7.341	1.00	19.36
ATOM	9797	O	SER	M	206	144.138	-21.690	6.332	1.00	16.46
ATOM	9798	CB	SER	M	206	146.726	-19.891	6.899	1.00	20.55
ATOM	9799	OG	SER	M	206	146.806	-20.922	5.930	1.00	25.71
ATOM	9800	N	SER	M	207	144.528	-21.682	8.548	1.00	15.04
ATOM	9801	CA	SER	M	207	143.929	-22.982	8.725	1.00	24.06
ATOM	9802	C	SER	M	207	143.655	-23.352	10.181	1.00	25.42
ATOM	9803	O	SER	M	207	144.233	-22.774	11.124	1.00	28.52
ATOM	9804	CB	SER	M	207	144.794	-24.310	8.044	1.00	25.46
ATOM	9805	OG	SER	M	207	145.849	-23.299	7.455	1.00	29.99
ATOM	9806	N	PRO	M	208	142.722	-24.299	10.379	1.00	19.49
ATOM	9807	CA	PRO	M	208	142.374	-24.719	11.718	1.00	15.17
ATOM	9808	C	PRO	M	208	143.506	-25.003	12.643	1.00	12.08
ATOM	9809	O	PRO	M	208	144.167	-26.014	12.535	1.00	13.93
ATOM	9810	CB	PRO	M	208	141.507	-25.935	11.483	1.00	19.67
ATOM	9811	CG	PRO	M	208	140.837	-25.641	10.187	1.00	20.87
ATOM	9812	CD	PRO	M	208	141.892	-24.985	9.369	1.00	18.58
ATOM	9813	N	VAL	M	209	143.650	-24.109	13.604	1.00	11.92
ATOM	9814	CA	VAL	M	209	144.643	-24.176	14.646	1.00	13.48
ATOM	9815	C	VAL	M	209	144.068	-25.105	15.717	1.00	18.15
ATOM	9816	O	VAL	M	209	142.965	-24.866	16.196	1.00	21.44
ATOM	9817	CB	VAL	M	209	144.832	-22.773	15.264	1.00	11.55
ATOM	9818	CG1	VAL	M	209	145.548	-22.857	16.620	1.00	8.23
ATOM	9819	CG2	VAL	M	209	145.597	-21.920	14.306	1.00	11.20
ATOM	9820	N	THR	M	210	144.779	-26.172	16.077	1.00	21.96
ATOM	9821	CA	THR	M	210	144.298	-27.067	17.140	1.00	20.89
ATOM	9822	C	THR	M	210	145.166	-26.835	18.349	1.00	22.43
ATOM	9823	O	THR	M	210	146.328	-26.536	18.190	1.00	30.03
ATOM	9824	CB	THR	M	210	144.435	-28.516	16.776	1.00	13.67
ATOM	9825	OG1	THR	M	210	143.526	-28.840	15.722	1.00	14.27
ATOM	9826	CG2	THR	M	210	144.153	-29.347	17.978	1.00	2.68
ATOM	9827	N	LYS	M	211	144.616	-26.932	19.546	1.00	26.00
ATOM	9828	CA	LYS	M	211	145.414	-26.728	20.754	1.00	31.83
ATOM	9829	C	LYS	M	211	145.045	-27.812	21.745	1.00	33.60
ATOM	9830	O	LYS	M	211	143.950	-27.816	22.295	1.00	37.15
ATOM	9831	CB	LYS	M	211	145.160	-25.342	21.356	1.00	32.13
ATOM	9832	CG	LYS	M	211	146.367	-24.744	22.120	1.00	37.81
ATOM	9833	CD	LYS	M	211	147.375	-24.008	21.200	1.00	38.01
ATOM	9834	CE	LYS	M	211	148.246	-22.995	21.966	1.00	39.58
ATOM	9835	NZ	LYS	M	211	149.268	-23.641	22.853	1.00	40.83
ATOM	9836	N	SER	M	212	145.969	-28.730	21.975	1.00	32.11
ATOM	9837	CA	SER	M	212	145.692	-29.841	22.846	1.00	28.51
ATOM	9838	C	SER	M	212	146.678	-29.981	23.931	1.00	27.57

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ATOM	9839	O	SER M 212	147.656	-29.273	23.981	1.00	28.81
ATOM	9840	CB	SER M 212	145.696	-31.123	22.038	1.00	31.73
ATOM	9841	OG	SER M 212	146.722	-31.109	21.060	1.00	36.27
ATOM	9842	N	PHE M 213	146.395	-30.930	24.804	1.00	32.35
ATOM	9843	CA	PHE M 213	147.258	-31.260	25.916	1.00	37.22
ATOM	9844	C	PHE M 213	146.828	-32.604	26.444	1.00	40.75
ATOM	9845	O	PHE M 213	145.713	-33.040	26.186	1.00	41.39
ATOM	9846	CB	PHE M 213	147.122	-30.239	27.014	1.00	37.15
ATOM	9847	CG	PHE M 213	145.915	-30.434	27.858	1.00	37.88
ATOM	9848	CD1	PHE M 213	144.786	-29.679	27.647	1.00	40.00
ATOM	9849	CD2	PHE M 213	145.928	-31.319	28.908	1.00	40.33
ATOM	9850	CE1	PHE M 213	143.701	-29.796	28.472	1.00	39.12
ATOM	9851	CE2	PHE M 213	144.835	-31.438	29.736	1.00	38.31
ATOM	9852	CZ	PHE M 213	143.726	-30.673	29.514	1.00	39.19
ATOM	9853	N	ASN M 214	147.711	-33.262	27.186	1.00	46.33
ATOM	9854	CA	ASN M 214	147.384	-34.565	27.746	1.00	51.34
ATOM	9855	C	ASN M 214	147.510	-34.476	29.255	1.00	52.68
ATOM	9856	O	ASN M 214	148.392	-33.786	29.781	1.00	50.93
ATOM	9857	CB	ASN M 214	148.327	-35.642	27.200	1.00	54.73
ATOM	9858	CG	ASN M 214	148.289	-35.741	25.686	1.00	58.71
ATOM	9859	OD1	ASN M 214	148.499	-34.756	24.973	1.00	63.30
ATOM	9860	ND2	ASN M 214	148.023	-36.935	25.189	1.00	60.04
ATOM	9861	N	ARG M 215	146.617	-35.159	29.954	1.00	55.21
ATOM	9862	CA	ARG M 215	146.651	-35.134	31.411	1.00	59.78
ATOM	9863	C	ARG M 215	148.040	-35.520	31.936	1.00	61.63
ATOM	9864	O	ARG M 215	148.668	-36.411	31.318	1.00	62.72
ATOM	9865	CB	ARG M 215	145.589	-36.081	31.983	1.00	60.73
ATOM	9866	CG	ARG M 215	144.359	-36.275	31.095	1.00	63.16
ATOM	9867	CD	ARG M 215	143.179	-36.766	31.916	1.00	66.18
ATOM	9868	NE	ARG M 215	143.395	-38.133	32.377	1.00	71.66
ATOM	9869	CZ	ARG M 215	143.971	-38.446	33.536	1.00	75.05
ATOM	9870	NH1	ARG M 215	144.385	-37.484	34.352	1.00	73.43
ATOM	9871	NH2	ARG M 215	144.149	-39.721	33.868	1.00	79.58
ATOM	9872	OT	ARG M 215	148.490	-34.928	32.949	1.00	63.51
ATOM	9873	N	GLN X 1	71.026	-41.683	32.529	1.00	46.62
ATOM	9874	CA	GLN X 1	69.796	-41.418	31.744	1.00	46.87
ATOM	9875	C	GLN X 1	69.396	-39.945	31.889	1.00	43.77
ATOM	9876	O	GLN X 1	69.374	-39.406	33.007	1.00	48.44
ATOM	9877	CB	GLN X 1	68.653	-42.308	32.258	1.00	55.21
ATOM	9878	CG	GLN X 1	69.073	-43.519	33.121	1.00	65.73
ATOM	9879	CD	GLN X 1	68.348	-44.839	32.736	1.00	71.25
ATOM	9880	OE1	GLN X 1	67.924	-45.611	33.611	1.00	71.23
ATOM	9881	NE2	GLN X 1	68.216	-45.094	31.427	1.00	73.19
ATOM	9882	N	VAL X 2	69.077	-39.279	30.783	1.00	33.49
ATOM	9883	CA	VAL X 2	68.658	-37.873	30.880	1.00	28.07
ATOM	9884	C	VAL X 2	67.170	-37.812	31.238	1.00	23.89
ATOM	9885	O	VAL X 2	66.338	-38.221	30.437	1.00	22.27
ATOM	9886	CB	VAL X 2	68.876	-37.130	29.522	1.00	27.42
ATOM	9887	CG1	VAL X 2	68.451	-38.063	28.389	1.00	26.38
ATOM	9888	CG2	VAL X 2	68.108	-35.797	29.459	1.00	16.93
ATOM	9889	N	GLN X 3	66.827	-37.316	32.425	1.00	20.40
ATOM	9890	CA	GLN X 3	65.421	-37.230	32.770	1.00	21.59
ATOM	9891	C	GLN X 3	64.912	-35.942	33.402	1.00	23.73
ATOM	9892	O	GLN X 3	65.642	-35.218	34.100	1.00	28.09
ATOM	9893	CB	GLN X 3	65.015	-38.418	33.635	1.00	24.27
ATOM	9894	CG	GLN X 3	65.640	-38.529	34.989	1.00	32.39
ATOM	9895	CD	GLN X 3	64.947	-39.601	35.842	1.00	42.14
ATOM	9896	OE1	GLN X 3	64.070	-40.333	35.363	1.00	45.71
ATOM	9897	NE2	GLN X 3	65.336	-39.695	37.115	1.00	48.46
ATOM	9898	N	LEU X 4	63.633	-35.679	33.144	1.00	19.53

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ATOM	9899	CA	LEU	X	4	62.937	-34.517	33.661	1.00	16.37
ATOM	9900	C	LEU	X	4	61.748	-34.986	34.525	1.00	19.52
ATOM	9901	O	LEU	X	4	60.784	-35.559	33.989	1.00	21.43
ATOM	9902	CB	LEU	X	4	62.383	-33.694	32.510	1.00	12.03
ATOM	9903	CG	LEU	X	4	63.346	-33.031	31.536	1.00	13.70
ATOM	9904	CD1	LEU	X	4	62.594	-31.946	30.723	1.00	10.74
ATOM	9905	CD2	LEU	X	4	64.493	-32.402	32.311	1.00	15.40
ATOM	9906	N	VAL	X	5	61.776	-34.710	35.832	1.00	17.65
ATOM	9907	CA	VAL	X	5	60.675	-35.120	36.693	1.00	12.57
ATOM	9908	C	VAL	X	5	59.782	-34.010	37.199	1.00	14.21
ATOM	9909	O	VAL	X	5	60.125	-33.347	38.164	1.00	20.37
ATOM	9910	CB	VAL	X	5	61.196	-35.816	37.850	1.00	9.45
ATOM	9911	CG1	VAL	X	5	60.076	-36.429	38.560	1.00	2.38
ATOM	9912	CG2	VAL	X	5	62.236	-36.839	37.362	1.00	12.40
ATOM	9913	N	GLN	X	6	58.648	-33.811	36.530	1.00	16.58
ATOM	9914	CA	GLN	X	6	57.648	-32.815	36.895	1.00	14.98
ATOM	9915	C	GLN	X	6	56.968	-33.137	38.262	1.00	18.53
ATOM	9916	O	GLN	X	6	56.987	-34.280	38.781	1.00	14.92
ATOM	9917	CB	GLN	X	6	56.602	-32.748	35.795	1.00	12.66
ATOM	9918	CG	GLN	X	6	56.433	-31.406	35.194	1.00	15.41
ATOM	9919	CD	GLN	X	6	56.188	-31.512	33.705	1.00	20.70
ATOM	9920	OE1	GLN	X	6	56.599	-32.492	33.085	1.00	21.38
ATOM	9921	NE2	GLN	X	6	55.515	-30.513	33.120	1.00	25.10
ATOM	9922	N	SER	X	7	56.325	-32.110	38.813	1.00	21.34
ATOM	9923	CA	SER	X	7	55.669	-32.176	40.124	1.00	17.82
ATOM	9924	C	SER	X	7	54.313	-32.842	40.072	1.00	18.60
ATOM	9925	O	SER	X	7	53.797	-33.165	38.976	1.00	21.72
ATOM	9926	CB	SER	X	7	55.476	-30.769	40.691	1.00	15.68
ATOM	9927	OG	SER	X	7	54.231	-30.237	40.249	1.00	23.32
ATOM	9928	N	GLY	X	8	53.734	-33.001	41.271	1.00	15.33
ATOM	9929	CA	GLY	X	8	52.426	-33.618	41.416	1.00	8.64
ATOM	9930	C	GLY	X	8	51.284	-32.809	40.834	1.00	6.79
ATOM	9931	O	GLY	X	8	51.382	-31.580	40.681	1.00	2.00
ATOM	9932	N	ALA	X	9	50.191	-33.512	40.515	1.00	11.48
ATOM	9933	CA	ALA	X	9	48.983	-32.893	39.956	1.00	15.20
ATOM	9934	C	ALA	X	9	48.423	-31.843	40.928	1.00	16.59
ATOM	9935	O	ALA	X	9	48.638	-31.898	42.136	1.00	17.93
ATOM	9936	CB	ALA	X	9	47.948	-33.949	39.676	1.00	13.96
ATOM	9937	N	GLU	X	10	47.716	-30.867	40.404	1.00	19.13
ATOM	9938	CA	GLU	X	10	47.194	-29.823	41.261	1.00	28.15
ATOM	9939	C	GLU	X	10	45.718	-29.550	40.936	1.00	31.97
ATOM	9940	O	GLU	X	10	45.327	-29.483	39.741	1.00	32.05
ATOM	9941	CB	GLU	X	10	48.024	-28.528	41.069	1.00	31.68
ATOM	9942	CG	GLU	X	10	48.857	-28.090	42.277	1.00	43.80
ATOM	9943	CD	GLU	X	10	50.314	-28.529	42.149	1.00	57.16
ATOM	9944	OE1	GLU	X	10	50.822	-28.569	41.002	1.00	59.15
ATOM	9945	OE2	GLU	X	10	50.957	-28.846	43.186	1.00	64.65
ATOM	9946	N	VAL	X	11	44.896	-29.420	41.989	1.00	30.41
ATOM	9947	CA	VAL	X	11	43.490	-29.060	41.792	1.00	25.53
ATOM	9948	C	VAL	X	11	43.347	-27.676	42.436	1.00	25.78
ATOM	9949	O	VAL	X	11	43.684	-27.475	43.598	1.00	25.00
ATOM	9950	CB	VAL	X	11	42.535	-30.060	42.412	1.00	19.01
ATOM	9951	CG1	VAL	X	11	41.371	-30.245	41.494	1.00	11.54
ATOM	9952	CG2	VAL	X	11	43.226	-31.389	42.601	1.00	22.40
ATOM	9953	N	VAL	X	12	42.907	-26.696	41.667	1.00	23.67
ATOM	9954	CA	VAL	X	12	42.805	-25.378	42.227	1.00	26.99
ATOM	9955	C	VAL	X	12	41.599	-24.620	41.714	1.00	30.48
ATOM	9956	O	VAL	X	12	41.180	-24.797	40.558	1.00	29.72
ATOM	9957	CB	VAL	X	12	44.020	-24.582	41.917	1.00	29.55
ATOM	9958	CG1	VAL	X	12	44.116	-24.384	40.436	1.00	35.36

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ATOM	9959	CG2	VAL	X	12	43.913	-23.241	42.592	1.00	38.40
ATOM	9960	N	LYS	X	13	41.041	-23.798	42.609	1.00	29.96
ATOM	9961	CA	LYS	X	13	39.858	-22.995	42.333	1.00	27.75
ATOM	9962	C	LYS	X	13	40.260	-21.861	41.430	1.00	23.43
ATOM	9963	O	LYS	X	13	41.392	-21.373	41.510	1.00	20.94
ATOM	9964	CB	LYS	X	13	39.264	-22.461	43.633	1.00	32.59
ATOM	9965	CG	LYS	X	13	40.085	-22.803	44.847	1.00	42.12
ATOM	9966	CD	LYS	X	13	41.471	-22.134	44.797	1.00	48.36
ATOM	9967	CE	LYS	X	13	42.473	-22.983	45.545	1.00	51.11
ATOM	9968	NZ	LYS	X	13	42.137	-24.432	45.453	1.00	55.36
ATOM	9969	N	PRO	X	14	39.345	-21.448	40.531	1.00	19.29
ATOM	9970	CA	PRO	X	14	39.562	-20.366	39.574	1.00	19.64
ATOM	9971	C	PRO	X	14	40.191	-19.203	40.237	1.00	22.45
ATOM	9972	O	PRO	X	14	40.070	-19.083	41.442	1.00	30.50
ATOM	9973	CB	PRO	X	14	38.168	-20.046	39.085	1.00	11.27
ATOM	9974	CG	PRO	X	14	37.531	-21.346	39.082	1.00	14.80
ATOM	9975	CD	PRO	X	14	38.013	-22.038	40.341	1.00	17.86
ATOM	9976	N	GLY	X	15	40.858	-18.356	39.457	1.00	22.71
ATOM	9977	CA	GLY	X	15	41.494	-17.167	39.995	1.00	27.51
ATOM	9978	C	GLY	X	15	42.735	-17.387	40.840	1.00	28.84
ATOM	9979	O	GLY	X	15	43.543	-16.471	41.054	1.00	30.94
ATOM	9980	N	ALA	X	16	42.878	-18.591	41.368	1.00	29.50
ATOM	9981	CA	ALA	X	16	44.067	-18.882	42.142	1.00	33.11
ATOM	9982	C	ALA	X	16	45.301	-18.914	41.213	1.00	36.53
ATOM	9983	O	ALA	X	16	45.267	-18.476	40.037	1.00	35.86
ATOM	9984	CB	ALA	X	16	43.903	-20.222	42.883	1.00	30.33
ATOM	9985	N	SER	X	17	46.402	-19.412	41.759	1.00	36.78
ATOM	9986	CA	SER	X	17	47.627	-19.506	41.002	1.00	37.18
ATOM	9987	C	SER	X	17	48.380	-20.703	41.501	1.00	35.86
ATOM	9988	O	SER	X	17	48.324	-21.057	42.683	1.00	39.00
ATOM	9989	CB	SER	X	17	48.453	-18.242	41.181	1.00	43.06
ATOM	9990	OG	SER	X	17	47.822	-17.162	40.505	1.00	56.54
ATOM	9991	N	VAL	X	18	49.093	-21.337	40.590	1.00	32.92
ATOM	9992	CA	VAL	X	18	49.827	-22.525	40.945	1.00	28.87
ATOM	9993	C	VAL	X	18	51.238	-22.418	40.385	1.00	26.11
ATOM	9994	O	VAL	X	18	51.435	-21.804	39.328	1.00	23.55
ATOM	9995	CB	VAL	X	18	49.100	-23.742	40.370	1.00	26.01
ATOM	9996	CG1	VAL	X	18	48.883	-23.525	38.874	1.00	24.53
ATOM	9997	CG2	VAL	X	18	49.858	-25.037	40.703	1.00	24.93
ATOM	9998	N	LYS	X	19	52.202	-23.032	41.086	1.00	21.55
ATOM	9999	CA	LYS	X	19	53.603	-22.990	40.669	1.00	16.11
ATOM	10000	C	LYS	X	19	54.220	-24.330	40.354	1.00	10.99
ATOM	10001	O	LYS	X	19	54.817	-24.945	41.222	1.00	8.40
ATOM	10002	CB	LYS	X	19	54.455	-22.346	41.749	1.00	20.76
ATOM	10003	CG	LYS	X	19	55.789	-21.797	41.256	1.00	23.07
ATOM	10004	CD	LYS	X	19	56.915	-22.175	42.200	1.00	21.18
ATOM	10005	CE	LYS	X	19	57.892	-21.058	42.248	1.00	27.17
ATOM	10006	NZ	LYS	X	19	59.057	-21.449	43.077	1.00	35.23
ATOM	10007	N	LEU	X	20	54.143	-24.744	39.098	1.00	10.96
ATOM	10008	CA	LEU	X	20	54.697	-26.026	38.664	1.00	14.24
ATOM	10009	C	LEU	X	20	56.233	-26.104	38.649	1.00	17.07
ATOM	10010	O	LEU	X	20	56.936	-25.167	38.251	1.00	21.19
ATOM	10011	CB	LEU	X	20	54.212	-26.351	37.266	1.00	11.76
ATOM	10012	CG	LEU	X	20	52.846	-26.966	37.206	1.00	8.87
ATOM	10013	CD1	LEU	X	20	51.984	-26.295	38.258	1.00	11.47
ATOM	10014	CD2	LEU	X	20	52.304	-26.767	35.825	1.00	12.47
ATOM	10015	N	SER	X	21	56.767	-27.239	39.054	1.00	14.10
ATOM	10016	CA	SER	X	21	58.202	-27.372	39.056	1.00	17.18
ATOM	10017	C	SER	X	21	58.618	-28.542	38.200	1.00	19.34
ATOM	10018	O	SER	X	21	57.848	-29.482	38.023	1.00	20.36

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ATOM	10019	CB	SER	X	21	58.690	-27.652	40.431	1.00	20.34
ATOM	10020	OG	SER	X	21	59.174	-28.983	40.396	1.00	30.77
ATOM	10021	N	CYS	X	22	59.863	-28.507	37.725	1.00	21.04
ATOM	10022	CA	CYS	X	22	60.393	-29.553	36.863	1.00	22.34
ATOM	10023	C	CYS	X	22	61.855	-29.689	37.171	1.00	25.19
ATOM	10024	O	CYS	X	22	62.599	-28.711	37.049	1.00	28.68
ATOM	10025	CB	CYS	X	22	60.233	-29.139	35.409	1.00	19.31
ATOM	10026	SG	CYS	X	22	61.200	-30.170	34.285	1.00	10.36
ATOM	10027	N	LYS	X	23	62.254	-30.881	37.603	1.00	27.71
ATOM	10028	CA	LYS	X	23	63.649	-31.160	37.961	1.00	30.68
ATOM	10029	C	LYS	X	23	64.392	-31.997	36.930	1.00	29.66
ATOM	10030	O	LYS	X	23	64.171	-33.210	36.839	1.00	31.01
ATOM	10031	CB	LYS	X	23	63.703	-31.891	39.305	1.00	33.03
ATOM	10032	CG	LYS	X	23	65.103	-32.223	39.789	1.00	39.66
ATOM	10033	CD	LYS	X	23	65.136	-32.245	41.328	1.00	50.37
ATOM	10034	CE	LYS	X	23	66.544	-32.492	41.893	1.00	52.86
ATOM	10035	NZ	LYS	X	23	66.955	-33.924	41.840	1.00	54.49
ATOM	10036	N	ALA	X	24	65.307	-31.366	36.196	1.00	25.56
ATOM	10037	CA	ALA	X	24	66.079	-32.064	35.173	1.00	20.66
ATOM	10038	C	ALA	X	24	67.210	-32.855	35.810	1.00	18.08
ATOM	10039	O	ALA	X	24	67.525	-32.702	36.980	1.00	19.73
ATOM	10040	CB	ALA	X	24	66.654	-31.077	34.203	1.00	19.10
ATOM	10041	N	SER	X	25	67.831	-33.704	35.025	1.00	17.53
ATOM	10042	CA	SER	X	25	68.938	-34.505	35.515	1.00	19.74
ATOM	10043	C	SER	X	25	69.474	-35.406	34.390	1.00	19.51
ATOM	10044	O	SER	X	25	68.770	-35.709	33.423	1.00	21.74
ATOM	10045	CB	SER	X	25	68.474	-35.349	36.703	1.00	21.47
ATOM	10046	OG	SER	X	25	67.981	-36.608	36.276	1.00	26.44
ATOM	10047	N	GLY	X	26	70.725	-35.829	34.492	1.00	17.08
ATOM	10048	CA	GLY	X	26	71.260	-36.685	33.444	1.00	18.84
ATOM	10049	C	GLY	X	26	71.987	-35.924	32.338	1.00	18.78
ATOM	10050	O	GLY	X	26	72.416	-36.514	31.329	1.00	16.29
ATOM	10051	N	TYR	X	27	72.106	-34.608	32.520	1.00	13.59
ATOM	10052	CA	TYR	X	27	72.766	-33.768	31.548	1.00	9.82
ATOM	10053	C	TYR	X	27	73.113	-32.417	32.151	1.00	13.09
ATOM	10054	O	TYR	X	27	72.807	-32.143	33.310	1.00	18.61
ATOM	10055	CB	TYR	X	27	71.852	-33.605	30.355	1.00	9.32
ATOM	10056	CG	TYR	X	27	70.640	-32.738	30.627	1.00	14.76
ATOM	10057	CD1	TYR	X	27	69.546	-33.242	31.312	1.00	15.90
ATOM	10058	CD2	TYR	X	27	70.562	-31.423	30.138	1.00	13.72
ATOM	10059	CE1	TYR	X	27	68.401	-32.465	31.490	1.00	19.27
ATOM	10060	CE2	TYR	X	27	69.422	-30.642	30.313	1.00	15.11
ATOM	10061	CZ	TYR	X	27	68.348	-31.162	30.975	1.00	18.07
ATOM	10062	OH	TYR	X	27	67.198	-30.400	31.036	1.00	20.88
ATOM	10063	N	ILE	X	28	73.797	-31.575	31.388	1.00	14.48
ATOM	10064	CA	ILE	X	28	74.165	-30.284	31.920	1.00	16.47
ATOM	10065	C	ILE	X	28	72.967	-29.397	31.778	1.00	17.31
ATOM	10066	O	ILE	X	28	72.558	-29.033	30.667	1.00	11.50
ATOM	10067	CB	ILE	X	28	75.387	-29.682	31.184	1.00	20.63
ATOM	10068	CG1	ILE	X	28	76.644	-30.431	31.598	1.00	16.22
ATOM	10069	CG2	ILE	X	28	75.581	-28.167	31.542	1.00	23.29
ATOM	10070	CD1	ILE	X	28	77.714	-30.249	30.604	1.00	22.94
ATOM	10071	N	PHE	X	29	72.413	-29.066	32.940	1.00	17.97
ATOM	10072	CA	PHE	X	29	71.216	-28.251	33.045	1.00	16.71
ATOM	10073	C	PHE	X	29	71.190	-26.990	32.225	1.00	16.56
ATOM	10074	O	PHE	X	29	70.257	-26.783	31.438	1.00	20.60
ATOM	10075	CB	PHE	X	29	70.969	-27.885	34.509	1.00	11.80
ATOM	10076	CG	PHE	X	29	69.627	-27.309	34.766	1.00	6.17
ATOM	10077	CD1	PHE	X	29	68.476	-27.959	34.358	1.00	3.91
ATOM	10078	CD2	PHE	X	29	69.526	-26.086	35.379	1.00	9.64

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ATOM	10079	CE1	PHE	X	29	67.289	-27.399	34.552	1.00	2.00
ATOM	10080	CE2	PHE	X	29	68.322	-25.519	35.576	1.00	12.49
ATOM	10081	CZ	PHE	X	29	67.200	-26.176	35.159	1.00	7.88
ATOM	10082	N	THR	X	30	72.202	-26.148	32.426	1.00	15.89
ATOM	10083	CA	THR	X	30	72.297	-24.845	31.750	1.00	13.88
ATOM	10084	C	THR	X	30	72.538	-24.894	30.246	1.00	9.44
ATOM	10085	O	THR	X	30	72.409	-23.905	29.555	1.00	9.24
ATOM	10086	CB	THR	X	30	73.420	-23.995	32.333	1.00	8.15
ATOM	10087	OG1	THR	X	30	74.647	-24.491	31.819	1.00	20.98
ATOM	10088	CG2	THR	X	30	73.489	-24.095	33.828	1.00	11.87
ATOM	10089	N	SER	X	31	72.868	-26.048	29.722	1.00	9.48
ATOM	10090	CA	SER	X	31	73.138	-26.109	28.317	1.00	13.88
ATOM	10091	C	SER	X	31	71.926	-26.413	27.467	1.00	16.47
ATOM	10092	O	SER	X	31	72.043	-26.745	26.274	1.00	19.21
ATOM	10093	CB	SER	X	31	74.235	-27.130	28.080	1.00	18.86
ATOM	10094	OG	SER	X	31	75.318	-26.887	28.969	1.00	23.51
ATOM	10095	N	TYR	X	32	70.747	-26.344	28.068	1.00	13.99
ATOM	10096	CA	TYR	X	32	69.561	-26.567	27.262	1.00	10.54
ATOM	10097	C	TYR	X	32	68.424	-25.624	27.564	1.00	10.77
ATOM	10098	O	TYR	X	32	68.136	-25.300	28.721	1.00	14.86
ATOM	10099	CB	TYR	X	32	69.116	-28.008	27.380	1.00	3.33
ATOM	10100	CG	TYR	X	32	70.160	-28.864	26.794	1.00	10.93
ATOM	10101	CD1	TYR	X	32	70.147	-29.164	25.458	1.00	16.38
ATOM	10102	CD2	TYR	X	32	71.203	-29.329	27.560	1.00	17.23
ATOM	10103	CE1	TYR	X	32	71.155	-29.915	24.892	1.00	20.42
ATOM	10104	CE2	TYR	X	32	72.211	-30.075	27.009	1.00	19.92
ATOM	10105	CZ	TYR	X	32	72.189	-30.367	25.678	1.00	19.34
ATOM	10106	OH	TYR	X	32	73.224	-31.090	25.131	1.00	29.00
ATOM	10107	N	TYR	X	33	67.793	-25.124	26.524	1.00	5.72
ATOM	10108	CA	TYR	X	33	66.656	-24.296	26.803	1.00	8.12
ATOM	10109	C	TYR	X	33	65.530	-25.257	27.266	1.00	9.00
ATOM	10110	O	TYR	X	33	65.265	-26.294	26.635	1.00	10.98
ATOM	10111	CB	TYR	X	33	66.234	-23.539	25.551	1.00	8.76
ATOM	10112	CG	TYR	X	33	66.900	-22.204	25.457	1.00	12.37
ATOM	10113	CD1	TYR	X	33	68.292	-22.105	25.433	1.00	17.21
ATOM	10114	CD2	TYR	X	33	66.163	-21.041	25.454	1.00	10.06
ATOM	10115	CE1	TYR	X	33	68.938	-20.860	25.416	1.00	18.76
ATOM	10116	CE2	TYR	X	33	66.799	-19.799	25.435	1.00	19.28
ATOM	10117	CZ	TYR	X	33	68.180	-19.716	25.419	1.00	19.52
ATOM	10118	OH	TYR	X	33	68.781	-18.483	25.420	1.00	24.32
ATOM	10119	N	MET	X	34	64.886	-24.918	28.380	1.00	9.86
ATOM	10120	CA	MET	X	34	63.766	-25.696	28.920	1.00	7.06
ATOM	10121	C	MET	X	34	62.501	-25.010	28.439	1.00	6.17
ATOM	10122	O	MET	X	34	62.343	-23.794	28.681	1.00	2.90
ATOM	10123	CB	MET	X	34	63.775	-25.671	30.432	1.00	2.00
ATOM	10124	CG	MET	X	34	62.910	-26.711	30.982	1.00	8.04
ATOM	10125	SD	MET	X	34	63.079	-28.355	30.276	1.00	17.67
ATOM	10126	CE	MET	X	34	64.103	-29.175	31.714	1.00	11.44
ATOM	10127	N	TYR	X	35	61.655	-25.755	27.716	1.00	3.69
ATOM	10128	CA	TYR	X	35	60.381	-25.218	27.204	1.00	6.93
ATOM	10129	C	TYR	X	35	59.278	-25.668	28.143	1.00	10.68
ATOM	10130	O	TYR	X	35	59.521	-26.387	29.118	1.00	18.18
ATOM	10131	CB	TYR	X	35	59.991	-25.831	25.865	1.00	8.81
ATOM	10132	CG	TYR	X	35	60.748	-25.445	24.655	1.00	9.24
ATOM	10133	CD1	TYR	X	35	61.858	-24.618	24.734	1.00	7.62
ATOM	10134	CD2	TYR	X	35	60.323	-25.888	23.405	1.00	8.74
ATOM	10135	CE1	TYR	X	35	62.526	-24.238	23.608	1.00	5.57
ATOM	10136	CE2	TYR	X	35	60.978	-25.519	22.278	1.00	12.43
ATOM	10137	CZ	TYR	X	35	62.088	-24.693	22.381	1.00	11.97
ATOM	10138	OH	TYR	X	35	62.796	-24.431	21.234	1.00	24.30

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ATOM	10139	N	TRP	X	36	58.057	-25.297	27.796	1.00	7.17
ATOM	10140	CA	TRP	X	36	56.910	-25.718	28.547	1.00	7.57
ATOM	10141	C	TRP	X	36	55.786	-25.831	27.528	1.00	13.84
ATOM	10142	O	TRP	X	36	55.544	-24.936	26.705	1.00	12.48
ATOM	10143	CB	TRP	X	36	56.589	-24.704	29.634	1.00	9.02
ATOM	10144	CG	TRP	X	36	57.584	-24.729	30.801	1.00	9.63
ATOM	10145	CD1	TRP	X	36	58.769	-24.050	30.878	1.00	14.14
ATOM	10146	CD2	TRP	X	36	57.435	-25.396	32.062	1.00	5.81
ATOM	10147	NE1	TRP	X	36	59.359	-24.252	32.103	1.00	7.93
ATOM	10148	CE2	TRP	X	36	58.558	-25.060	32.844	1.00	4.99
ATOM	10149	CE3	TRP	X	36	56.458	-26.237	32.600	1.00	7.08
ATOM	10150	CZ2	TRP	X	36	58.729	-25.526	34.125	1.00	13.32
ATOM	10151	CZ3	TRP	X	36	56.627	-26.703	33.868	1.00	10.61
ATOM	10152	CH2	TRP	X	36	57.756	-26.345	34.628	1.00	13.87
ATOM	10153	N	VAL	X	37	55.085	-26.949	27.572	1.00	19.60
ATOM	10154	CA	VAL	X	37	54.001	-27.183	26.624	1.00	19.27
ATOM	10155	C	VAL	X	37	52.717	-27.530	27.346	1.00	20.33
ATOM	10156	O	VAL	X	37	52.735	-28.350	28.258	1.00	22.56
ATOM	10157	CB	VAL	X	37	54.368	-28.330	25.721	1.00	15.58
ATOM	10158	CG1	VAL	X	37	53.363	-28.463	24.621	1.00	14.05
ATOM	10159	CG2	VAL	X	37	55.769	-28.101	25.192	1.00	10.74
ATOM	10160	N	LYS	X	38	51.609	-26.926	26.927	1.00	18.17
ATOM	10161	CA	LYS	X	38	50.328	-27.179	27.563	1.00	17.22
ATOM	10162	C	LYS	X	38	49.576	-28.027	26.576	1.00	14.10
ATOM	10163	O	LYS	X	38	49.719	-27.792	25.380	1.00	10.14
ATOM	10164	CB	LYS	X	38	49.595	-25.841	27.801	1.00	19.37
ATOM	10165	CG	LYS	X	38	48.129	-25.748	27.316	1.00	24.80
ATOM	10166	CD	LYS	X	38	47.129	-25.363	28.453	1.00	27.64
ATOM	10167	CE	LYS	X	38	46.658	-23.902	28.330	1.00	31.62
ATOM	10168	NZ	LYS	X	38	46.563	-23.157	29.655	1.00	29.26
ATOM	10169	N	GLN	X	39	48.809	-29.007	27.073	1.00	15.00
ATOM	10170	CA	GLN	X	39	47.955	-29.892	26.234	1.00	17.98
ATOM	10171	C	GLN	X	39	46.660	-30.041	27.042	1.00	20.85
ATOM	10172	O	GLN	X	39	46.655	-30.583	28.160	1.00	19.09
ATOM	10173	CB	GLN	X	39	48.594	-31.272	25.959	1.00	8.89
ATOM	10174	CG	GLN	X	39	47.644	-32.255	25.324	1.00	6.61
ATOM	10175	CD	GLN	X	39	48.271	-33.346	24.369	1.00	10.60
ATOM	10176	OE1	GLN	X	39	49.134	-34.166	24.775	1.00	3.59
ATOM	10177	NE2	GLN	X	39	47.788	-33.370	23.105	1.00	2.00
ATOM	10178	N	ALA	X	40	45.575	-29.505	26.489	1.00	24.41
ATOM	10179	CA	ALA	X	40	44.302	-29.544	27.173	1.00	27.67
ATOM	10180	C	ALA	X	40	43.418	-30.622	26.643	1.00	36.64
ATOM	10181	O	ALA	X	40	43.476	-30.967	25.449	1.00	33.38
ATOM	10182	CB	ALA	X	40	43.603	-28.242	27.053	1.00	29.02
ATOM	10183	N	PRO	X	41	42.570	-31.179	27.537	1.00	45.42
ATOM	10184	CA	PRO	X	41	41.653	-32.245	27.145	1.00	46.57
ATOM	10185	C	PRO	X	41	41.151	-32.029	25.714	1.00	44.88
ATOM	10186	O	PRO	X	41	40.507	-31.034	25.379	1.00	42.59
ATOM	10187	CB	PRO	X	41	40.571	-32.179	28.230	1.00	46.42
ATOM	10188	CG	PRO	X	41	41.359	-31.824	29.468	1.00	42.61
ATOM	10189	CD	PRO	X	41	42.417	-30.838	28.973	1.00	45.65
ATOM	10190	N	GLY	X	42	41.515	-32.957	24.849	1.00	48.12
ATOM	10191	CA	GLY	X	42	41.091	-32.842	23.473	1.00	56.54
ATOM	10192	C	GLY	X	42	41.863	-31.749	22.777	1.00	60.29
ATOM	10193	O	GLY	X	42	42.166	-31.869	21.587	1.00	63.68
ATOM	10194	N	GLN	X	43	42.162	-30.676	23.502	1.00	60.59
ATOM	10195	CA	GLN	X	43	42.942	-29.590	22.934	1.00	62.05
ATOM	10196	C	GLN	X	43	44.370	-30.131	22.607	1.00	61.34
ATOM	10197	O	GLN	X	43	44.850	-31.086	23.251	1.00	61.18
ATOM	10198	CB	GLN	X	43	43.002	-28.411	23.922	1.00	62.00



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ATOM	10199	CG	GLN	X	43	43.275	-27.051	23.263	1.00	64.76
ATOM	10200	CD	GLN	X	43	43.295	-27.126	21.732	1.00	65.41
ATOM	10201	OE1	GLN	X	43	42.249	-27.339	21.106	1.00	61.94
ATOM	10202	NE2	GLN	X	43	44.490	-26.962	21.129	1.00	63.50
ATOM	10203	N	GLY	X	44	45.038	-29.528	21.613	1.00	55.97
ATOM	10204	CA	GLY	X	44	46.370	-29.980	21.220	1.00	46.51
ATOM	10205	C	GLY	X	44	47.571	-29.611	22.092	1.00	37.54
ATOM	10206	O	GLY	X	44	47.450	-29.323	23.307	1.00	35.68
ATOM	10207	N	LEU	X	45	48.740	-29.657	21.458	1.00	23.24
ATOM	10208	CA	LEU	X	45	49.973	-29.304	22.116	1.00	14.52
ATOM	10209	C	LEU	X	45	50.198	-27.807	21.852	1.00	12.89
ATOM	10210	O	LEU	X	45	50.125	-27.326	20.710	1.00	13.04
ATOM	10211	CB	LEU	X	45	51.119	-30.109	21.533	1.00	14.26
ATOM	10212	CG	LEU	X	45	51.558	-31.489	22.004	1.00	14.07
ATOM	10213	CD1	LEU	X	45	50.730	-31.943	23.101	1.00	21.43
ATOM	10214	CD2	LEU	X	45	51.453	-32.461	20.847	1.00	13.02
ATOM	10215	N	GLU	X	46	50.418	-27.052	22.912	1.00	8.24
ATOM	10216	CA	GLU	X	46	50.649	-25.638	22.758	1.00	9.61
ATOM	10217	C	GLU	X	46	51.946	-25.258	23.451	1.00	15.24
ATOM	10218	O	GLU	X	46	52.198	-25.693	24.586	1.00	22.42
ATOM	10219	CB	GLU	X	46	49.525	-24.866	23.404	1.00	10.42
ATOM	10220	CG	GLU	X	46	48.258	-24.759	22.622	1.00	12.97
ATOM	10221	CD	GLU	X	46	47.556	-23.427	22.848	1.00	22.19
ATOM	10222	OE1	GLU	X	46	47.008	-23.195	23.950	1.00	30.87
ATOM	10223	OE2	GLU	X	46	47.544	-22.591	21.920	1.00	20.69
ATOM	10224	N	TRP	X	47	52.771	-24.445	22.794	1.00	12.42
ATOM	10225	CA	TRP	X	47	54.027	-24.034	23.404	1.00	12.71
ATOM	10226	C	TRP	X	47	53.768	-22.811	24.268	1.00	9.30
ATOM	10227	O	TRP	X	47	53.223	-21.822	23.800	1.00	9.35
ATOM	10228	CB	TRP	X	47	55.076	-23.715	22.313	1.00	13.60
ATOM	10229	CG	TRP	X	47	56.490	-23.314	22.824	1.00	16.40
ATOM	10230	CD1	TRP	X	47	57.493	-24.150	23.273	1.00	14.86
ATOM	10231	CD2	TRP	X	47	57.006	-21.986	22.945	1.00	15.44
ATOM	10232	NE1	TRP	X	47	58.589	-23.412	23.661	1.00	10.47
ATOM	10233	CE2	TRP	X	47	58.313	-22.085	23.481	1.00	11.93
ATOM	10234	CE3	TRP	X	47	56.497	-20.720	22.660	1.00	20.97
ATOM	10235	CZ2	TRP	X	47	59.097	-20.973	23.733	1.00	15.42
ATOM	10236	CZ3	TRP	X	47	57.283	-19.613	22.908	1.00	21.21
ATOM	10237	CH2	TRP	X	47	58.569	-19.747	23.442	1.00	16.43
ATOM	10238	N	ILE	X	48	54.159	-22.857	25.530	1.00	5.61
ATOM	10239	CA	ILE	X	48	53.944	-21.686	26.377	1.00	8.06
ATOM	10240	C	ILE	X	48	55.148	-20.711	26.265	1.00	8.82
ATOM	10241	O	ILE	X	48	55.023	-19.556	25.870	1.00	7.08
ATOM	10242	CB	ILE	X	48	53.762	-22.113	27.862	1.00	7.14
ATOM	10243	CG1	ILE	X	48	52.424	-22.806	28.041	1.00	6.25
ATOM	10244	CG2	ILE	X	48	53.908	-20.933	28.811	1.00	2.00
ATOM	10245	CD1	ILE	X	48	52.499	-23.894	29.124	1.00	8.19
ATOM	10246	N	GLY	X	49	56.326	-21.187	26.620	1.00	10.62
ATOM	10247	CA	GLY	X	49	57.485	-20.325	26.578	1.00	9.29
ATOM	10248	C	GLY	X	49	58.783	-21.104	26.695	1.00	9.45
ATOM	10249	O	GLY	X	49	58.831	-22.355	26.659	1.00	10.50
ATOM	10250	N	GLU	X	50	59.861	-20.346	26.830	1.00	7.56
ATOM	10251	CA	GLU	X	50	61.171	-20.945	26.955	1.00	7.10
ATOM	10252	C	GLU	X	50	61.976	-20.217	27.984	1.00	7.02
ATOM	10253	O	GLU	X	50	61.773	-19.022	28.193	1.00	9.86
ATOM	10254	CB	GLU	X	50	61.918	-20.862	25.659	1.00	5.87
ATOM	10255	CG	GLU	X	50	62.406	-19.469	25.369	1.00	2.00
ATOM	10256	CD	GLU	X	50	63.043	-19.400	24.008	1.00	2.00
ATOM	10257	OE1	GLU	X	50	63.469	-20.457	23.524	1.00	9.00
ATOM	10258	OE2	GLU	X	50	63.110	-18.314	23.399	1.00	2.00

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ATOM	10259	N	ILE	X	51	62.899	-20.930	28.616	1.00	4.51
ATOM	10260	CA	ILE	X	51	63.751	-20.301	29.606	1.00	10.57
ATOM	10261	C	ILE	X	51	65.150	-20.880	29.446	1.00	15.83
ATOM	10262	O	ILE	X	51	65.332	-22.089	29.313	1.00	22.74
ATOM	10263	CB	ILE	X	51	63.291	-20.572	31.059	1.00	8.55
ATOM	10264	CG1	ILE	X	51	64.139	-19.747	32.040	1.00	2.00
ATOM	10265	CG2	ILE	X	51	63.494	-22.056	31.394	1.00	7.63
ATOM	10266	CD1	ILE	X	51	63.380	-19.126	33.162	1.00	6.58
ATOM	10267	N	ASN	X	52	66.155	-20.028	29.435	1.00	14.13
ATOM	10268	CA	ASN	X	52	67.502	-20.550	29.344	1.00	13.36
ATOM	10269	C	ASN	X	52	67.819	-20.687	30.827	1.00	6.52
ATOM	10270	O	ASN	X	52	67.751	-19.732	31.585	1.00	7.86
ATOM	10271	CB	ASN	X	52	68.401	-19.529	28.641	1.00	21.15
ATOM	10272	CG	ASN	X	52	69.869	-19.662	29.019	1.00	24.44
ATOM	10273	OD1	ASN	X	52	70.238	-20.291	30.023	1.00	22.52
ATOM	10274	ND2	ASN	X	52	70.718	-19.063	28.200	1.00	26.87
ATOM	10275	N	PRO	X	53	68.176	-21.874	31.268	1.00	3.21
ATOM	10276	CA	PRO	X	53	68.432	-21.869	32.707	1.00	9.69
ATOM	10277	C	PRO	X	53	69.728	-21.225	33.151	1.00	8.34
ATOM	10278	O	PRO	X	53	69.863	-20.790	34.291	1.00	12.06
ATOM	10279	CB	PRO	X	53	68.346	-23.356	33.107	1.00	10.00
ATOM	10280	CG	PRO	X	53	68.662	-24.107	31.874	1.00	8.84
ATOM	10281	CD	PRO	X	53	68.386	-23.192	30.657	1.00	6.05
ATOM	10282	N	SER	X	54	70.703	-21.186	32.275	1.00	10.97
ATOM	10283	CA	SER	X	54	71.972	-20.587	32.664	1.00	15.57
ATOM	10284	C	SER	X	54	71.766	-19.118	32.985	1.00	16.77
ATOM	10285	O	SER	X	54	72.333	-18.538	33.926	1.00	13.83
ATOM	10286	CB	SER	X	54	72.981	-20.711	31.515	1.00	16.48
ATOM	10287	OG	SER	X	54	73.512	-19.445	31.153	1.00	19.14
ATOM	10288	N	ASN	X	55	70.912	-18.547	32.159	1.00	19.69
ATOM	10289	CA	ASN	X	55	70.563	-17.145	32.161	1.00	20.23
ATOM	10290	C	ASN	X	55	69.509	-16.568	33.125	1.00	20.67
ATOM	10291	O	ASN	X	55	69.760	-15.596	33.864	1.00	17.94
ATOM	10292	CB	ASN	X	55	70.143	-16.836	30.732	1.00	24.40
ATOM	10293	CG	ASN	X	55	70.757	-15.574	30.214	1.00	32.25
ATOM	10294	OD1	ASN	X	55	71.390	-14.824	30.963	1.00	25.01
ATOM	10295	ND2	ASN	X	55	70.581	-15.325	28.914	1.00	37.14
ATOM	10296	N	GLY	X	56	68.308	-17.145	33.027	1.00	21.44
ATOM	10297	CA	GLY	X	56	67.162	-16.697	33.787	1.00	15.73
ATOM	10298	C	GLY	X	56	66.295	-16.075	32.713	1.00	10.77
ATOM	10299	O	GLY	X	56	65.133	-15.858	32.931	1.00	13.77
ATOM	10300	N	ASP	X	57	66.909	-15.787	31.564	1.00	10.36
ATOM	10301	CA	ASP	X	57	66.304	-15.200	30.370	1.00	6.44
ATOM	10302	C	ASP	X	57	65.161	-16.084	29.831	1.00	5.96
ATOM	10303	O	ASP	X	57	65.252	-17.333	29.818	1.00	4.29
ATOM	10304	CB	ASP	X	57	67.408	-15.041	29.340	1.00	10.94
ATOM	10305	CG	ASP	X	57	66.985	-14.241	28.180	1.00	12.37
ATOM	10306	OD1	ASP	X	57	67.577	-14.420	27.083	1.00	17.72
ATOM	10307	OD2	ASP	X	57	66.047	-13.447	28.389	1.00	6.16
ATOM	10308	N	THR	X	58	64.090	-15.425	29.386	1.00	2.00
ATOM	10309	CA	THR	X	58	62.892	-16.113	28.922	1.00	2.00
ATOM	10310	C	THR	X	58	62.285	-15.614	27.627	1.00	2.00
ATOM	10311	O	THR	X	58	62.601	-14.537	27.117	1.00	2.49
ATOM	10312	CB	THR	X	58	61.721	-16.019	29.958	1.00	2.00
ATOM	10313	OG1	THR	X	58	61.088	-14.742	29.832	1.00	3.40
ATOM	10314	CG2	THR	X	58	62.176	-16.159	31.372	1.00	2.00
ATOM	10315	N	ASN	X	59	61.341	-16.384	27.121	1.00	2.00
ATOM	10316	CA	ASN	X	59	60.684	-15.988	25.903	1.00	3.29
ATOM	10317	C	ASN	X	59	59.375	-16.679	25.905	1.00	4.77
ATOM	10318	O	ASN	X	59	59.358	-17.901	26.017	1.00	16.59

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ATOM	10319	CB	ASN	X	59	61.522	-16.406	24.709	1.00	2.00
ATOM	10320	CG	ASN	X	59	62.531	-15.369	24.379	1.00	2.00
ATOM	10321	OD1	ASN	X	59	62.181	-14.264	24.002	1.00	11.22
ATOM	10322	ND2	ASN	X	59	63.793	-15.681	24.570	1.00	11.22
ATOM	10323	N	PHE	X	60	58.286	-15.914	25.791	1.00	2.00
ATOM	10324	CA	PHE	X	60	56.949	-16.498	25.812	1.00	2.80
ATOM	10325	C	PHE	X	60	56.159	-16.512	24.528	1.00	2.00
ATOM	10326	O	PHE	X	60	56.457	-15.800	23.608	1.00	5.72
ATOM	10327	CB	PHE	X	60	56.093	-15.800	26.862	1.00	2.00
ATOM	10328	CG	PHE	X	60	56.553	-16.039	28.258	1.00	2.00
ATOM	10329	CD1	PHE	X	60	57.689	-15.426	28.731	1.00	2.00
ATOM	10330	CD2	PHE	X	60	55.871	-16.902	29.094	1.00	2.73
ATOM	10331	CE1	PHE	X	60	58.134	-15.670	30.018	1.00	2.06
ATOM	10332	CE2	PHE	X	60	56.317	-17.157	30.391	1.00	4.01
ATOM	10333	CZ	PHE	X	60	57.440	-16.547	30.855	1.00	4.07
ATOM	10334	N	ASN	X	61	55.147	-17.353	24.463	1.00	3.41
ATOM	10335	CA	ASN	X	61	54.260	-17.369	23.314	1.00	4.95
ATOM	10336	C	ASN	X	61	53.363	-16.222	23.753	1.00	7.86
ATOM	10337	O	ASN	X	61	52.850	-16.240	24.877	1.00	4.55
ATOM	10338	CB	ASN	X	61	53.428	-18.640	23.303	1.00	3.80
ATOM	10339	CG	ASN	X	61	52.317	-18.601	22.269	1.00	5.24
ATOM	10340	OD1	ASN	X	61	51.985	-17.535	21.682	1.00	2.00
ATOM	10341	ND2	ASN	X	61	51.731	-19.777	22.020	1.00	3.56
ATOM	10342	N	GLU	X	62	53.229	-15.199	22.919	1.00	10.94
ATOM	10343	CA	GLU	X	62	52.370	-14.053	23.244	1.00	12.79
ATOM	10344	C	GLU	X	62	51.071	-14.535	23.879	1.00	13.92
ATOM	10345	O	GLU	X	62	50.688	-14.088	24.956	1.00	15.22
ATOM	10346	CB	GLU	X	62	52.039	-13.281	21.971	1.00	14.76
ATOM	10347	CG	GLU	X	62	52.178	-11.801	22.073	1.00	22.15
ATOM	10348	CD	GLU	X	62	53.587	-11.418	22.368	1.00	34.66
ATOM	10349	OE1	GLU	X	62	53.880	-10.970	23.514	1.00	41.43
ATOM	10350	OE2	GLU	X	62	54.407	-11.581	21.437	1.00	41.99
ATOM	10351	N	LYS	X	63	50.423	-15.487	23.215	1.00	16.02
ATOM	10352	CA	LYS	X	63	49.169	-16.055	23.682	1.00	15.35
ATOM	10353	C	LYS	X	63	49.222	-16.475	25.156	1.00	17.51
ATOM	10354	O	LYS	X	63	48.192	-16.787	25.712	1.00	25.66
ATOM	10355	CB	LYS	X	63	48.780	-17.238	22.784	1.00	18.29
ATOM	10356	CG	LYS	X	63	48.052	-18.367	23.452	1.00	28.88
ATOM	10357	CD	LYS	X	63	46.527	-18.158	23.372	1.00	46.63
ATOM	10358	CE	LYS	X	63	45.704	-19.180	24.231	1.00	48.94
ATOM	10359	NZ	LYS	X	63	44.279	-19.401	23.743	1.00	48.82
ATOM	10360	N	PHE	X	64	50.388	-16.469	25.808	1.00	18.07
ATOM	10361	CA	PHE	X	64	50.476	-16.850	27.239	1.00	16.52
ATOM	10362	C	PHE	X	64	51.314	-15.904	28.067	1.00	20.43
ATOM	10363	O	PHE	X	64	51.585	-16.164	29.244	1.00	21.76
ATOM	10364	CB	PHE	X	64	51.111	-18.206	27.424	1.00	8.71
ATOM	10365	CG	PHE	X	64	50.280	-19.324	26.955	1.00	8.49
ATOM	10366	CD1	PHE	X	64	50.078	-19.548	25.584	1.00	11.24
ATOM	10367	CD2	PHE	X	64	49.742	-20.201	27.873	1.00	3.43
ATOM	10368	CE1	PHE	X	64	49.331	-20.677	25.131	1.00	11.58
ATOM	10369	CE2	PHE	X	64	49.006	-21.315	27.457	1.00	8.25
ATOM	10370	CZ	PHE	X	64	48.796	-21.560	26.077	1.00	11.33
ATOM	10371	N	LYS	X	65	51.766	-14.827	27.447	1.00	25.65
ATOM	10372	CA	LYS	X	65	52.607	-13.867	28.141	1.00	25.79
ATOM	10373	C	LYS	X	65	52.084	-13.506	29.529	1.00	26.01
ATOM	10374	O	LYS	X	65	52.870	-13.243	30.440	1.00	23.77
ATOM	10375	CB	LYS	X	65	52.765	-12.604	27.299	1.00	27.72
ATOM	10376	CG	LYS	X	65	54.188	-12.067	27.261	1.00	37.00
ATOM	10377	CD	LYS	X	65	54.766	-11.885	28.677	1.00	48.17
ATOM	10378	CE	LYS	X	65	55.608	-13.101	29.123	1.00	55.93

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ATOM	10379	NZ	LYS	X	65	55.242	-13.752	30.455	1.00	54.89
ATOM	10380	N	SER	X	66	50.758	-13.514	29.687	1.00	29.95
ATOM	10381	CA	SER	X	66	50.088	-13.176	30.960	1.00	30.56
ATOM	10382	C	SER	X	66	49.968	-14.348	31.945	1.00	27.56
ATOM	10383	O	SER	X	66	50.222	-14.212	33.126	1.00	32.00
ATOM	10384	CB	SER	X	66	48.693	-12.692	30.673	1.00	31.16
ATOM	10385	OG	SER	X	66	48.041	-13.694	29.910	1.00	43.93
ATOM	10386	N	LYS	X	67	49.578	-15.510	31.462	1.00	24.26
ATOM	10387	CA	LYS	X	67	49.434	-16.665	32.336	1.00	25.61
ATOM	10388	C	LYS	X	67	50.715	-17.259	32.958	1.00	28.71
ATOM	10389	O	LYS	X	67	50.675	-17.742	34.101	1.00	30.00
ATOM	10390	CB	LYS	X	67	48.725	-17.792	31.577	1.00	23.01
ATOM	10391	CG	LYS	X	67	47.418	-18.234	32.196	1.00	31.79
ATOM	10392	CD	LYS	X	67	46.282	-17.200	31.975	1.00	37.06
ATOM	10393	CE	LYS	X	67	45.026	-17.837	31.371	1.00	35.14
ATOM	10394	NZ	LYS	X	67	44.781	-17.345	29.973	1.00	41.07
ATOM	10395	N	ALA	X	68	51.847	-17.237	32.237	1.00	26.24
ATOM	10396	CA	ALA	X	68	53.036	-17.913	32.772	1.00	21.60
ATOM	10397	C	ALA	X	68	54.184	-17.098	33.282	1.00	17.55
ATOM	10398	O	ALA	X	68	54.339	-15.950	32.920	1.00	22.76
ATOM	10399	CB	ALA	X	68	53.562	-18.941	31.752	1.00	22.22
ATOM	10400	N	THR	X	69	54.997	-17.720	34.121	1.00	12.21
ATOM	10401	CA	THR	X	69	56.145	-17.062	34.702	1.00	14.74
ATOM	10402	C	THR	X	69	57.224	-18.115	34.881	1.00	20.13
ATOM	10403	O	THR	X	69	57.274	-18.798	35.918	1.00	21.87
ATOM	10404	CB	THR	X	69	55.799	-16.519	36.057	1.00	13.80
ATOM	10405	OG1	THR	X	69	54.454	-16.040	36.026	1.00	26.91
ATOM	10406	CG2	THR	X	69	56.704	-15.434	36.449	1.00	13.12
ATOM	10407	N	LEU	X	70	58.075	-18.239	33.855	1.00	20.34
ATOM	10408	CA	LEU	X	70	59.202	-19.182	33.832	1.00	11.56
ATOM	10409	C	LEU	X	70	60.342	-18.675	34.725	1.00	9.08
ATOM	10410	O	LEU	X	70	60.624	-17.476	34.762	1.00	11.62
ATOM	10411	CB	LEU	X	70	59.683	-19.312	32.400	1.00	8.65
ATOM	10412	CG	LEU	X	70	58.561	-19.749	31.505	1.00	3.22
ATOM	10413	CD1	LEU	X	70	59.117	-20.417	30.273	1.00	3.57
ATOM	10414	CD2	LEU	X	70	57.801	-20.769	32.271	1.00	5.11
ATOM	10415	N	THR	X	71	60.977	-19.582	35.458	1.00	4.43
ATOM	10416	CA	THR	X	71	62.062	-19.221	36.392	1.00	5.71
ATOM	10417	C	THR	X	71	62.838	-20.495	36.654	1.00	2.87
ATOM	10418	O	THR	X	71	62.334	-21.562	36.372	1.00	6.72
ATOM	10419	CB	THR	X	71	61.456	-18.688	37.740	1.00	5.47
ATOM	10420	OG1	THR	X	71	61.877	-19.497	38.838	1.00	7.31
ATOM	10421	CG2	THR	X	71	59.934	-18.779	37.706	1.00	13.43
ATOM	10422	N	VAL	X	72	64.058	-20.433	37.168	1.00	3.99
ATOM	10423	CA	VAL	X	72	64.771	-21.700	37.386	1.00	8.37
ATOM	10424	C	VAL	X	72	65.737	-21.605	38.534	1.00	12.54
ATOM	10425	O	VAL	X	72	66.187	-20.524	38.874	1.00	17.14
ATOM	10426	CB	VAL	X	72	65.617	-22.185	36.106	1.00	8.74
ATOM	10427	CG1	VAL	X	72	65.135	-21.535	34.791	1.00	15.98
ATOM	10428	CG2	VAL	X	72	67.057	-21.814	36.262	1.00	5.83
ATOM	10429	N	ASP	X	73	66.070	-22.741	39.123	1.00	18.24
ATOM	10430	CA	ASP	X	73	67.029	-22.755	40.207	1.00	24.14
ATOM	10431	C	ASP	X	73	68.247	-23.502	39.733	1.00	28.90
ATOM	10432	O	ASP	X	73	68.412	-24.678	40.110	1.00	30.43
ATOM	10433	CB	ASP	X	73	66.529	-23.501	41.418	1.00	25.63
ATOM	10434	CG	ASP	X	73	67.633	-23.757	42.409	1.00	27.35
ATOM	10435	OD1	ASP	X	73	68.727	-23.188	42.244	1.00	31.37
ATOM	10436	OD2	ASP	X	73	67.425	-24.518	43.358	1.00	33.96
ATOM	10437	N	LYS	X	74	69.063	-22.824	38.913	1.00	27.88
ATOM	10438	CA	LYS	X	74	70.316	-23.343	38.373	1.00	22.71

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ATOM	10439	C	LYS	X	74	70.912	-24.356	39.365	1.00	22.07
ATOM	10440	O	LYS	X	74	71.202	-25.503	39.009	1.00	20.39
ATOM	10441	CB	LYS	X	74	71.277	-22.168	38.209	1.00	27.20
ATOM	10442	CG	LYS	X	74	72.036	-22.069	36.921	1.00	27.13
ATOM	10443	CD	LYS	X	74	73.345	-21.301	37.201	1.00	34.04
ATOM	10444	CE	LYS	X	74	73.373	-19.911	36.548	1.00	36.91
ATOM	10445	NZ	LYS	X	74	74.550	-19.751	35.638	1.00	37.11
ATOM	10446	N	SER	X	75	71.059	-23.947	40.625	1.00	18.38
ATOM	10447	CA	SER	X	75	71.639	-24.835	41.606	1.00	21.80
ATOM	10448	C	SER	X	75	70.905	-26.146	41.686	1.00	24.42
ATOM	10449	O	SER	X	75	71.500	-27.183	41.481	1.00	30.44
ATOM	10450	CB	SER	X	75	71.640	-24.206	42.984	1.00	22.20
ATOM	10451	OG	SER	X	75	71.015	-25.093	43.893	1.00	32.57
ATOM	10452	N	ALA	X	76	69.617	-26.113	41.995	1.00	25.64
ATOM	10453	CA	ALA	X	76	68.861	-27.349	42.108	1.00	24.29
ATOM	10454	C	ALA	X	76	68.519	-27.977	40.745	1.00	23.30
ATOM	10455	O	ALA	X	76	67.772	-28.958	40.665	1.00	19.57
ATOM	10456	CB	ALA	X	76	67.608	-27.090	42.896	1.00	30.37
ATOM	10457	N	SER	X	77	69.087	-27.430	39.676	1.00	22.84
ATOM	10458	CA	SER	X	77	68.803	-27.946	38.340	1.00	22.86
ATOM	10459	C	SER	X	77	67.288	-28.096	38.148	1.00	18.23
ATOM	10460	O	SER	X	77	66.793	-29.167	37.794	1.00	15.54
ATOM	10461	CB	SER	X	77	69.468	-29.301	38.179	1.00	24.37
ATOM	10462	OG	SER	X	77	69.258	-29.785	36.871	1.00	33.75
ATOM	10463	N	THR	X	78	66.550	-27.021	38.379	1.00	14.84
ATOM	10464	CA	THR	X	78	65.106	-27.120	38.304	1.00	13.98
ATOM	10465	C	THR	X	78	64.467	-25.879	37.681	1.00	16.74
ATOM	10466	O	THR	X	78	64.915	-24.739	37.885	1.00	20.89
ATOM	10467	CB	THR	X	78	64.492	-27.311	39.767	1.00	11.87
ATOM	10468	OG1	THR	X	78	64.875	-28.573	40.344	1.00	5.70
ATOM	10469	CG2	THR	X	78	62.994	-27.235	39.720	1.00	5.45
ATOM	10470	N	ALA	X	79	63.387	-26.098	36.950	1.00	12.22
ATOM	10471	CA	ALA	X	79	62.695	-24.981	36.357	1.00	12.86
ATOM	10472	C	ALA	X	79	61.363	-24.959	37.042	1.00	14.06
ATOM	10473	O	ALA	X	79	60.989	-25.945	37.654	1.00	17.24
ATOM	10474	CB	ALA	X	79	62.504	-25.189	34.903	1.00	12.41
ATOM	10475	N	TYR	X	80	60.655	-23.842	36.938	1.00	15.46
ATOM	10476	CA	TYR	X	80	59.342	-23.680	37.549	1.00	16.21
ATOM	10477	C	TYR	X	80	58.444	-22.818	36.689	1.00	20.04
ATOM	10478	O	TYR	X	80	58.881	-21.809	36.117	1.00	25.95
ATOM	10479	CB	TYR	X	80	59.471	-22.984	38.881	1.00	17.00
ATOM	10480	CG	TYR	X	80	60.387	-23.663	39.851	1.00	17.32
ATOM	10481	CD1	TYR	X	80	59.884	-24.357	40.927	1.00	18.22
ATOM	10482	CD2	TYR	X	80	61.754	-23.555	39.737	1.00	16.28
ATOM	10483	CE1	TYR	X	80	60.725	-24.927	41.881	1.00	21.28
ATOM	10484	CE2	TYR	X	80	62.593	-24.122	40.685	1.00	21.89
ATOM	10485	CZ	TYR	X	80	62.070	-24.809	41.761	1.00	20.45
ATOM	10486	OH	TYR	X	80	62.879	-25.394	42.710	1.00	21.46
ATOM	10487	N	MET	X	81	57.169	-23.191	36.640	1.00	23.16
ATOM	10488	CA	MET	X	81	56.182	-22.443	35.869	1.00	25.52
ATOM	10489	C	MET	X	81	55.127	-21.955	36.834	1.00	26.99
ATOM	10490	O	MET	X	81	54.679	-22.717	37.693	1.00	26.91
ATOM	10491	CB	MET	X	81	55.493	-23.308	34.807	1.00	17.74
ATOM	10492	CG	MET	X	81	54.483	-22.516	34.012	1.00	11.03
ATOM	10493	SD	MET	X	81	54.197	-23.250	32.408	1.00	14.03
ATOM	10494	CE	MET	X	81	53.324	-24.765	32.868	1.00	10.67
ATOM	10495	N	GLU	X	82	54.740	-20.691	36.719	1.00	27.98
ATOM	10496	CA	GLU	X	82	53.715	-20.171	37.593	1.00	31.07
ATOM	10497	C	GLU	X	82	52.571	-19.632	36.770	1.00	31.55
ATOM	10498	O	GLU	X	82	52.666	-18.569	36.147	1.00	31.48

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ATOM	10499	CB	GLU	X	82	54.262	-19.066	38.491	1.00	35.59
ATOM	10500	CG	GLU	X	82	53.440	-18.812	39.734	1.00	48.87
ATOM	10501	CD	GLU	X	82	54.056	-17.740	40.616	1.00	58.36
ATOM	10502	OE1	GLU	X	82	55.205	-17.948	41.078	1.00	65.37
ATOM	10503	OE2	GLU	X	82	53.404	-16.692	40.845	1.00	63.28
ATOM	10504	N	LEU	X	83	51.475	-20.377	36.774	1.00	33.28
ATOM	10505	CA	LEU	X	83	50.287	-19.943	36.065	1.00	34.75
ATOM	10506	C	LEU	X	83	49.482	-19.157	37.122	1.00	33.00
ATOM	10507	O	LEU	X	83	49.382	-19.555	38.290	1.00	30.64
ATOM	10508	CB	LEU	X	83	49.518	-21.156	35.543	1.00	34.44
ATOM	10509	CG	LEU	X	83	50.445	-22.086	34.763	1.00	31.57
ATOM	10510	CD1	LEU	X	83	49.900	-23.504	34.665	1.00	31.05
ATOM	10511	CD2	LEU	X	83	50.612	-21.490	33.391	1.00	32.59
ATOM	10512	N	SER	X	84	48.949	-18.014	36.728	1.00	31.47
ATOM	10513	CA	SER	X	84	48.224	-17.216	37.677	1.00	33.70
ATOM	10514	C	SER	X	84	46.881	-16.828	37.102	1.00	35.25
ATOM	10515	O	SER	X	84	46.689	-16.909	35.875	1.00	33.53
ATOM	10516	CB	SER	X	84	49.057	-15.981	38.023	1.00	36.91
ATOM	10517	OG	SER	X	84	49.865	-15.580	36.924	1.00	46.07
ATOM	10518	N	SER	X	85	45.976	-16.413	38.001	1.00	32.85
ATOM	10519	CA	SER	X	85	44.635	-15.997	37.642	1.00	31.64
ATOM	10520	C	SER	X	85	44.096	-17.054	36.698	1.00	30.79
ATOM	10521	O	SER	X	85	43.807	-16.793	35.526	1.00	29.08
ATOM	10522	CB	SER	X	85	44.668	-14.618	36.970	1.00	36.25
ATOM	10523	OG	SER	X	85	45.738	-14.495	36.034	1.00	45.56
ATOM	10524	N	LEU	X	86	43.966	-18.259	37.229	1.00	29.44
ATOM	10525	CA	LEU	X	86	43.487	-19.379	36.449	1.00	28.04
ATOM	10526	C	LEU	X	86	42.003	-19.338	36.162	1.00	26.35
ATOM	10527	O	LEU	X	86	41.205	-19.274	37.070	1.00	25.96
ATOM	10528	CB	LEU	X	86	43.818	-20.668	37.169	1.00	26.65
ATOM	10529	CG	LEU	X	86	45.320	-20.839	37.221	1.00	27.12
ATOM	10530	CD1	LEU	X	86	45.745	-21.605	38.442	1.00	29.11
ATOM	10531	CD2	LEU	X	86	45.733	-21.535	35.952	1.00	26.23
ATOM	10532	N	ARG	X	87	41.654	-19.350	34.884	1.00	26.89
ATOM	10533	CA	ARG	X	87	40.275	-19.376	34.455	1.00	26.46
ATOM	10534	C	ARG	X	87	40.066	-20.862	34.398	1.00	24.82
ATOM	10535	O	ARG	X	87	40.932	-21.614	34.815	1.00	17.18
ATOM	10536	CB	ARG	X	87	40.098	-18.814	33.044	1.00	34.47
ATOM	10537	CG	ARG	X	87	40.648	-17.418	32.788	1.00	45.70
ATOM	10538	CD	ARG	X	87	41.493	-17.390	31.500	1.00	53.71
ATOM	10539	NE	ARG	X	87	40.687	-17.368	30.281	1.00	59.40
ATOM	10540	CZ	ARG	X	87	39.923	-16.343	29.920	1.00	65.00
ATOM	10541	NH1	ARG	X	87	39.861	-15.259	30.684	1.00	67.88
ATOM	10542	NH2	ARG	X	87	39.230	-16.390	28.788	1.00	67.38
ATOM	10543	N	SER	X	88	38.906	-21.282	33.915	1.00	31.09
ATOM	10544	CA	SER	X	88	38.608	-22.713	33.807	1.00	37.33
ATOM	10545	C	SER	X	88	39.279	-23.370	32.598	1.00	34.75
ATOM	10546	O	SER	X	88	39.710	-24.534	32.665	1.00	33.32
ATOM	10547	CB	SER	X	88	37.085	-22.957	33.752	1.00	38.51
ATOM	10548	OG	SER	X	88	36.677	-23.439	32.473	1.00	44.05
ATOM	10549	N	GLU	X	89	39.365	-22.638	31.498	1.00	28.61
ATOM	10550	CA	GLU	X	89	39.996	-23.187	30.322	1.00	31.29
ATOM	10551	C	GLU	X	89	41.513	-23.370	30.486	1.00	32.65
ATOM	10552	O	GLU	X	89	42.180	-23.791	29.553	1.00	32.61
ATOM	10553	CB	GLU	X	89	39.712	-22.297	29.141	1.00	34.33
ATOM	10554	CG	GLU	X	89	38.347	-21.708	29.223	1.00	43.99
ATOM	10555	CD	GLU	X	89	38.311	-20.511	30.114	1.00	47.52
ATOM	10556	OE1	GLU	X	89	37.281	-20.333	30.804	1.00	54.79
ATOM	10557	OE2	GLU	X	89	39.313	-19.757	30.119	1.00	47.95
ATOM	10558	N	ASP	X	90	42.049	-23.078	31.676	1.00	33.11

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ATOM	10559	CA	ASP	X	90	43.477	-23.229	31.954	1.00	28.74
ATOM	10560	C	ASP	X	90	43.773	-24.667	32.326	1.00	29.91
ATOM	10561	O	ASP	X	90	44.910	-25.039	32.461	1.00	31.09
ATOM	10562	CB	ASP	X	90	43.890	-22.332	33.116	1.00	30.21
ATOM	10563	CG	ASP	X	90	44.185	-20.921	32.666	1.00	32.98
ATOM	10564	OD1	ASP	X	90	44.156	-20.712	31.439	1.00	33.24
ATOM	10565	OD2	ASP	X	90	44.441	-20.025	33.504	1.00	31.11
ATOM	10566	N	THR	X	91	42.741	-25.474	32.526	1.00	35.65
ATOM	10567	CA	THR	X	91	42.922	-26.882	32.886	1.00	34.07
ATOM	10568	C	THR	X	91	43.569	-27.619	31.729	1.00	28.78
ATOM	10569	O	THR	X	91	43.177	-27.414	30.577	1.00	25.91
ATOM	10570	CB	THR	X	91	41.542	-27.603	33.214	1.00	35.78
ATOM	10571	OG1	THR	X	91	40.745	-26.798	34.106	1.00	36.01
ATOM	10572	CG2	THR	X	91	41.796	-28.985	33.834	1.00	33.09
ATOM	10573	N	ALA	X	92	44.535	-28.477	32.061	1.00	25.64
ATOM	10574	CA	ALA	X	92	45.251	-29.308	31.091	1.00	22.38
ATOM	10575	C	ALA	X	92	46.492	-29.973	31.683	1.00	20.72
ATOM	10576	O	ALA	X	92	46.685	-29.996	32.905	1.00	18.97
ATOM	10577	CB	ALA	X	92	45.652	-28.479	29.917	1.00	25.83
ATOM	10578	N	VAL	X	93	47.320	-30.554	30.814	1.00	18.90
ATOM	10579	CA	VAL	X	93	48.578	-31.115	31.292	1.00	18.17
ATOM	10580	C	VAL	X	93	49.720	-30.238	30.768	1.00	21.31
ATOM	10581	O	VAL	X	93	49.792	-29.882	29.576	1.00	17.16
ATOM	10582	CB	VAL	X	93	48.813	-32.530	30.904	1.00	9.29
ATOM	10583	CG1	VAL	X	93	50.041	-33.015	31.595	1.00	2.00
ATOM	10584	CG2	VAL	X	93	47.687	-33.343	31.370	1.00	16.72
ATOM	10585	N	TYR	X	94	50.552	-29.833	31.722	1.00	21.60
ATOM	10586	CA	TYR	X	94	51.679	-28.965	31.495	1.00	19.13
ATOM	10587	C	TYR	X	94	52.907	-29.835	31.511	1.00	19.80
ATOM	10588	O	TYR	X	94	53.194	-30.526	32.478	1.00	21.75
ATOM	10589	CB	TYR	X	94	51.708	-27.905	32.596	1.00	20.94
ATOM	10590	CG	TYR	X	94	50.536	-26.964	32.466	1.00	26.11
ATOM	10591	CD1	TYR	X	94	49.282	-27.268	33.020	1.00	23.72
ATOM	10592	CD2	TYR	X	94	50.638	-25.837	31.655	1.00	30.74
ATOM	10593	CE1	TYR	X	94	48.150	-26.455	32.735	1.00	26.48
ATOM	10594	CE2	TYR	X	94	49.530	-25.024	31.365	1.00	30.66
ATOM	10595	CZ	TYR	X	94	48.297	-25.325	31.888	1.00	28.06
ATOM	10596	OH	TYR	X	94	47.269	-24.476	31.510	1.00	20.97
ATOM	10597	N	TYR	X	95	53.613	-29.814	30.395	1.00	19.96
ATOM	10598	CA	TYR	X	95	54.802	-30.601	30.213	1.00	14.55
ATOM	10599	C	TYR	X	95	55.998	-29.684	30.232	1.00	13.43
ATOM	10600	O	TYR	X	95	55.913	-28.562	29.698	1.00	10.91
ATOM	10601	CB	TYR	X	95	54.725	-31.273	28.853	1.00	13.61
ATOM	10602	CG	TYR	X	95	53.834	-32.487	28.806	1.00	11.96
ATOM	10603	CD1	TYR	X	95	54.021	-33.549	29.687	1.00	13.54
ATOM	10604	CD2	TYR	X	95	52.824	-32.588	27.857	1.00	12.97
ATOM	10605	CE1	TYR	X	95	53.214	-34.690	29.622	1.00	18.84
ATOM	10606	CE2	TYR	X	95	52.005	-33.723	27.772	1.00	16.65
ATOM	10607	CZ	TYR	X	95	52.203	-34.774	28.667	1.00	20.69
ATOM	10608	OH	TYR	X	95	51.364	-35.873	28.684	1.00	19.28
ATOM	10609	N	CYS	X	96	57.095	-30.137	30.856	1.00	10.61
ATOM	10610	CA	CYS	X	96	58.341	-29.356	30.835	1.00	9.82
ATOM	10611	C	CYS	X	96	59.132	-30.265	29.940	1.00	7.14
ATOM	10612	O	CYS	X	96	59.027	-31.503	30.043	1.00	2.00
ATOM	10613	CB	CYS	X	96	59.055	-29.191	32.206	1.00	6.48
ATOM	10614	SG	CYS	X	96	59.951	-30.667	32.749	1.00	10.52
ATOM	10615	N	THR	X	97	59.831	-29.642	28.990	1.00	8.56
ATOM	10616	CA	THR	X	97	60.650	-30.404	28.065	1.00	9.45
ATOM	10617	C	THR	X	97	61.901	-29.648	27.676	1.00	6.63
ATOM	10618	O	THR	X	97	61.891	-28.421	27.644	1.00	4.64

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ATOM	10619	CB	THR	X	97	59.831	-30.857	26.803	1.00	6.32
ATOM	10620	OG1	THR	X	97	60.703	-31.341	25.777	1.00	4.32
ATOM	10621	CG2	THR	X	97	59.020	-29.735	26.275	1.00	12.03
ATOM	10622	N	ARG	X	98	62.973	-30.429	27.474	1.00	8.74
ATOM	10623	CA	ARG	X	98	64.333	-30.007	27.064	1.00	6.24
ATOM	10624	C	ARG	X	98	64.414	-29.775	25.544	1.00	3.94
ATOM	10625	O	ARG	X	98	64.211	-30.706	24.734	1.00	4.11
ATOM	10626	CB	ARG	X	98	65.337	-31.111	27.414	1.00	7.44
ATOM	10627	CG	ARG	X	98	66.698	-30.626	27.717	1.00	8.48
ATOM	10628	CD	ARG	X	98	67.608	-31.163	26.681	1.00	10.70
ATOM	10629	NE	ARG	X	98	68.486	-32.181	27.223	1.00	8.81
ATOM	10630	CZ	ARG	X	98	68.968	-33.172	26.490	1.00	11.61
ATOM	10631	NH1	ARG	X	98	68.644	-33.253	25.208	1.00	7.62
ATOM	10632	NH2	ARG	X	98	69.720	-34.101	27.052	1.00	17.99
ATOM	10633	N	SER	X	99	64.694	-28.546	25.140	1.00	2.00
ATOM	10634	CA	SER	X	99	64.802	-28.272	23.713	1.00	4.93
ATOM	10635	C	SER	X	99	66.236	-28.562	23.361	1.00	11.22
ATOM	10636	O	SER	X	99	67.157	-28.267	24.126	1.00	14.99
ATOM	10637	CB	SER	X	99	64.518	-26.813	23.384	1.00	2.00
ATOM	10638	OG	SER	X	99	65.734	-26.074	23.374	1.00	8.54
ATOM	10639	N	ASP	X	100	66.439	-29.098	22.176	1.00	13.25
ATOM	10640	CA	ASP	X	100	67.774	-29.450	21.746	1.00	15.68
ATOM	10641	C	ASP	X	100	68.185	-28.390	20.739	1.00	13.40
ATOM	10642	O	ASP	X	100	67.946	-28.498	19.528	1.00	16.01
ATOM	10643	CB	ASP	X	100	67.716	-30.859	21.149	1.00	22.65
ATOM	10644	CG	ASP	X	100	68.986	-31.275	20.504	1.00	22.54
ATOM	10645	OD1	ASP	X	100	68.873	-32.033	19.522	1.00	22.08
ATOM	10646	OD2	ASP	X	100	70.065	-30.852	20.976	1.00	29.25
ATOM	10647	N	GLY	X	101	68.776	-27.333	21.259	1.00	12.70
ATOM	10648	CA	GLY	X	101	69.199	-26.256	20.394	1.00	16.26
ATOM	10649	C	GLY	X	101	68.000	-25.436	20.033	1.00	18.45
ATOM	10650	O	GLY	X	101	67.952	-24.790	18.981	1.00	22.93
ATOM	10651	N	ARG	X	102	67.020	-25.478	20.928	1.00	18.04
ATOM	10652	CA	ARG	X	102	65.780	-24.752	20.735	1.00	11.53
ATOM	10653	C	ARG	X	102	65.086	-25.171	19.422	1.00	10.32
ATOM	10654	O	ARG	X	102	64.550	-24.343	18.697	1.00	11.18
ATOM	10655	CB	ARG	X	102	66.073	-23.252	20.778	1.00	2.00
ATOM	10656	CG	ARG	X	102	66.402	-22.856	22.152	1.00	2.00
ATOM	10657	CD	ARG	X	102	66.866	-21.431	22.253	1.00	2.00
ATOM	10658	NE	ARG	X	102	65.795	-20.443	22.207	1.00	2.00
ATOM	10659	CZ	ARG	X	102	65.497	-19.734	21.127	1.00	2.01
ATOM	10660	NH1	ARG	X	102	66.200	-19.929	20.026	1.00	7.94
ATOM	10661	NH2	ARG	X	102	64.515	-18.831	21.142	1.00	2.19
ATOM	10662	N	ASN	X	103	65.105	-26.455	19.099	1.00	10.30
ATOM	10663	CA	ASN	X	103	64.449	-26.894	17.876	1.00	16.44
ATOM	10664	C	ASN	X	103	63.622	-28.144	18.146	1.00	19.12
ATOM	10665	O	ASN	X	103	62.436	-28.042	18.455	1.00	26.27
ATOM	10666	CB	ASN	X	103	65.493	-27.109	16.777	1.00	18.16
ATOM	10667	CG	ASN	X	103	65.981	-25.781	16.159	1.00	19.24
ATOM	10668	OD1	ASN	X	103	66.995	-25.189	16.566	1.00	12.49
ATOM	10669	ND2	ASN	X	103	65.238	-25.309	15.179	1.00	19.08
ATOM	10670	N	ASP	X	104	64.213	-29.323	18.022	1.00	13.55
ATOM	10671	CA	ASP	X	104	63.466	-30.518	18.345	1.00	9.57
ATOM	10672	C	ASP	X	104	63.382	-30.435	19.881	1.00	12.39
ATOM	10673	O	ASP	X	104	64.340	-29.967	20.525	1.00	13.14
ATOM	10674	CB	ASP	X	104	64.251	-31.781	17.916	1.00	11.36
ATOM	10675	CG	ASP	X	104	65.740	-31.792	18.402	1.00	15.33
ATOM	10676	OD1	ASP	X	104	66.114	-32.581	19.318	1.00	7.58
ATOM	10677	OD2	ASP	X	104	66.560	-31.015	17.841	1.00	22.96
ATOM	10678	N	MET	X	105	62.246	-30.823	20.475	1.00	11.45



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ATOM	10679	CA	MET	X	105	62.113	-30.831	21.953	1.00	6.14
ATOM	10680	C	MET	X	105	62.307	-32.315	22.240	1.00	2.66
ATOM	10681	O	MET	X	105	61.416	-33.111	21.975	1.00	2.39
ATOM	10682	CB	MET	X	105	60.712	-30.338	22.377	1.00	7.28
ATOM	10683	CG	MET	X	105	59.936	-29.581	21.248	1.00	14.36
ATOM	10684	SD	MET	X	105	58.621	-28.370	21.712	1.00	4.53
ATOM	10685	CE	MET	X	105	57.941	-29.308	23.061	1.00	10.35
ATOM	10686	N	ASP	X	106	63.502	-32.694	22.687	1.00	4.57
ATOM	10687	CA	ASP	X	106	63.823	-34.111	22.908	1.00	7.48
ATOM	10688	C	ASP	X	106	63.626	-34.901	24.189	1.00	9.70
ATOM	10689	O	ASP	X	106	64.078	-36.042	24.235	1.00	5.51
ATOM	10690	CB	ASP	X	106	65.258	-34.383	22.484	1.00	7.68
ATOM	10691	CG	ASP	X	106	66.312	-33.724	23.429	1.00	12.68
ATOM	10692	OD1	ASP	X	106	65.971	-33.244	24.545	1.00	7.21
ATOM	10693	OD2	ASP	X	106	67.509	-33.681	23.046	1.00	20.16
ATOM	10694	N	SER	X	107	63.056	-34.313	25.241	1.00	12.41
ATOM	10695	CA	SER	X	107	62.783	-35.076	26.464	1.00	13.75
ATOM	10696	C	SER	X	107	61.691	-34.360	27.229	1.00	17.30
ATOM	10697	O	SER	X	107	61.703	-33.118	27.348	1.00	16.44
ATOM	10698	CB	SER	X	107	64.015	-35.185	27.341	1.00	16.70
ATOM	10699	OG	SER	X	107	65.124	-35.655	26.613	1.00	26.49
ATOM	10700	N	TRP	X	108	60.752	-35.135	27.765	1.00	15.11
ATOM	10701	CA	TRP	X	108	59.654	-34.519	28.481	1.00	15.86
ATOM	10702	C	TRP	X	108	59.425	-35.063	29.873	1.00	18.08
ATOM	10703	O	TRP	X	108	59.665	-36.248	30.121	1.00	18.33
ATOM	10704	CB	TRP	X	108	58.358	-34.703	27.698	1.00	14.70
ATOM	10705	CG	TRP	X	108	58.400	-34.221	26.265	1.00	13.75
ATOM	10706	CD1	TRP	X	108	59.366	-34.466	25.341	1.00	6.59
ATOM	10707	CD2	TRP	X	108	57.436	-33.378	25.626	1.00	12.22
ATOM	10708	NE1	TRP	X	108	59.069	-33.821	24.172	1.00	2.00
ATOM	10709	CE2	TRP	X	108	57.891	-33.146	24.318	1.00	8.11
ATOM	10710	CE3	TRP	X	108	56.230	-32.789	26.043	1.00	6.72
ATOM	10711	CZ2	TRP	X	108	57.190	-32.353	23.418	1.00	7.15
ATOM	10712	CZ3	TRP	X	108	55.531	-32.004	25.154	1.00	2.00
ATOM	10713	CH2	TRP	X	108	56.010	-31.790	23.853	1.00	7.56
ATOM	10714	N	GLY	X	109	58.942	-34.187	30.767	1.00	18.96
ATOM	10715	CA	GLY	X	109	58.574	-34.589	32.121	1.00	15.50
ATOM	10716	C	GLY	X	109	57.245	-35.394	32.013	1.00	14.79
ATOM	10717	O	GLY	X	109	56.587	-35.418	30.950	1.00	9.36
ATOM	10718	N	GLN	X	110	56.832	-36.056	33.093	1.00	11.48
ATOM	10719	CA	GLN	X	110	55.635	-36.872	33.045	1.00	7.25
ATOM	10720	C	GLN	X	110	54.468	-36.095	32.576	1.00	13.44
ATOM	10721	O	GLN	X	110	53.628	-36.617	31.848	1.00	17.60
ATOM	10722	CB	GLN	X	110	55.299	-37.374	34.401	1.00	2.00
ATOM	10723	CG	GLN	X	110	56.474	-37.584	35.250	1.00	12.69
ATOM	10724	CD	GLN	X	110	56.675	-36.475	36.258	1.00	23.30
ATOM	10725	OE1	GLN	X	110	55.743	-36.046	36.952	1.00	30.91
ATOM	10726	NE2	GLN	X	110	57.909	-36.007	36.357	1.00	26.50
ATOM	10727	N	GLY	X	111	54.430	-34.842	33.018	1.00	17.22
ATOM	10728	CA	GLY	X	111	53.337	-33.936	32.709	1.00	15.09
ATOM	10729	C	GLY	X	111	52.686	-33.544	34.029	1.00	13.38
ATOM	10730	O	GLY	X	111	52.820	-34.249	35.028	1.00	14.39
ATOM	10731	N	THR	X	112	52.024	-32.403	34.089	1.00	13.64
ATOM	10732	CA	THR	X	112	51.349	-32.063	35.331	1.00	15.68
ATOM	10733	C	THR	X	112	49.942	-31.677	34.987	1.00	16.26
ATOM	10734	O	THR	X	112	49.712	-30.831	34.142	1.00	17.20
ATOM	10735	CB	THR	X	112	52.026	-30.937	36.084	1.00	19.60
ATOM	10736	OG1	THR	X	112	53.276	-31.427	36.597	1.00	24.08
ATOM	10737	CG2	THR	X	112	51.159	-30.488	37.273	1.00	14.21
ATOM	10738	N	LEU	X	113	48.998	-32.324	35.650	1.00	16.22

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ATOM	10739	CA	LEU	X	113	47.596	-32.075	35.403	1.00	17.95
ATOM	10740	C	LEU	X	113	47.147	-30.924	36.298	1.00	18.01
ATOM	10741	O	LEU	X	113	47.056	-31.069	37.514	1.00	22.45
ATOM	10742	CB	LEU	X	113	46.815	-33.344	35.741	1.00	22.55
ATOM	10743	CG	LEU	X	113	45.452	-33.567	35.097	1.00	22.44
ATOM	10744	CD1	LEU	X	113	44.357	-33.031	36.044	1.00	25.27
ATOM	10745	CD2	LEU	X	113	45.409	-32.871	33.750	1.00	22.51
ATOM	10746	N	VAL	X	114	46.922	-29.763	35.719	1.00	15.95
ATOM	10747	CA	VAL	X	114	46.459	-28.637	36.519	1.00	17.42
ATOM	10748	C	VAL	X	114	44.990	-28.530	36.154	1.00	21.06
ATOM	10749	O	VAL	X	114	44.627	-28.243	35.001	1.00	18.80
ATOM	10750	CB	VAL	X	114	47.244	-27.321	36.189	1.00	16.49
ATOM	10751	CG1	VAL	X	114	46.369	-26.079	36.337	1.00	8.72
ATOM	10752	CG2	VAL	X	114	48.417	-27.213	37.119	1.00	12.84
ATOM	10753	N	THR	X	115	44.140	-28.803	37.137	1.00	22.51
ATOM	10754	CA	THR	X	115	42.719	-28.753	36.893	1.00	19.34
ATOM	10755	C	THR	X	115	42.148	-27.673	37.773	1.00	18.14
ATOM	10756	O	THR	X	115	42.227	-27.723	39.013	1.00	18.21
ATOM	10757	CB	THR	X	115	42.093	-30.096	37.182	1.00	18.13
ATOM	10758	OG1	THR	X	115	40.798	-29.888	37.742	1.00	18.59
ATOM	10759	CG2	THR	X	115	42.981	-30.898	38.123	1.00	16.59
ATOM	10760	N	VAL	X	116	41.613	-26.653	37.131	1.00	17.08
ATOM	10761	CA	VAL	X	116	41.090	-25.542	37.895	1.00	22.82
ATOM	10762	C	VAL	X	116	39.565	-25.466	37.863	1.00	26.65
ATOM	10763	O	VAL	X	116	38.951	-25.206	36.817	1.00	24.14
ATOM	10764	CB	VAL	X	116	41.728	-24.188	37.424	1.00	22.35
ATOM	10765	CG1	VAL	X	116	43.225	-24.306	37.373	1.00	17.23
ATOM	10766	CG2	VAL	X	116	41.193	-23.783	36.061	1.00	22.27
ATOM	10767	N	SER	X	117	38.959	-25.715	39.019	1.00	30.99
ATOM	10768	CA	SER	X	117	37.510	-25.677	39.129	1.00	36.70
ATOM	10769	C	SER	X	117	37.045	-25.217	40.506	1.00	39.85
ATOM	10770	O	SER	X	117	37.790	-25.350	41.492	1.00	37.84
ATOM	10771	CB	SER	X	117	36.921	-27.060	38.806	1.00	36.43
ATOM	10772	OG	SER	X	117	36.262	-27.630	39.920	1.00	39.18
ATOM	10773	N	SER	X	118	35.812	-24.686	40.543	1.00	41.03
ATOM	10774	CA	SER	X	118	35.153	-24.187	41.762	1.00	40.48
ATOM	10775	C	SER	X	118	34.587	-25.339	42.574	1.00	38.92
ATOM	10776	O	SER	X	118	34.448	-25.264	43.782	1.00	36.76
ATOM	10777	CB	SER	X	118	34.021	-23.256	41.379	1.00	40.57
ATOM	10778	OG	SER	X	118	33.826	-23.336	39.981	1.00	44.77
ATOM	10779	N	ALA	X	119	34.256	-26.417	41.895	1.00	41.50
ATOM	10780	CA	ALA	X	119	33.733	-27.589	42.569	1.00	46.00
ATOM	10781	C	ALA	X	119	34.640	-27.944	43.750	1.00	46.53
ATOM	10782	O	ALA	X	119	35.748	-27.413	43.884	1.00	49.30
ATOM	10783	CB	ALA	X	119	33.661	-28.766	41.568	1.00	48.10
ATOM	10784	N	SER	X	120	34.168	-28.845	44.604	1.00	46.42
ATOM	10785	CA	SER	X	120	34.950	-29.280	45.746	1.00	47.32
ATOM	10786	C	SER	X	120	34.793	-30.780	45.953	1.00	43.68
ATOM	10787	O	SER	X	120	33.712	-31.341	45.784	1.00	37.83
ATOM	10788	CB	SER	X	120	34.535	-28.506	46.992	1.00	51.99
ATOM	10789	OG	SER	X	120	34.336	-27.139	46.657	1.00	59.86
ATOM	10790	N	THR	X	121	35.913	-31.422	46.267	1.00	44.05
ATOM	10791	CA	THR	X	121	35.948	-32.853	46.475	1.00	42.68
ATOM	10792	C	THR	X	121	34.596	-33.351	46.844	1.00	41.01
ATOM	10793	O	THR	X	121	33.863	-32.676	47.528	1.00	42.89
ATOM	10794	CB	THR	X	121	36.950	-33.238	47.545	1.00	42.78
ATOM	10795	OG1	THR	X	121	38.264	-33.235	46.966	1.00	50.22
ATOM	10796	CG2	THR	X	121	36.650	-34.618	48.068	1.00	42.30
ATOM	10797	N	LYS	X	122	34.261	-34.534	46.359	1.00	42.75
ATOM	10798	CA	LYS	X	122	32.960	-35.121	46.620	1.00	41.99

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ATOM	10799	C	LYS	X	122	32.923	-36.523	46.025	1.00	41.30
ATOM	10800	O	LYS	X	122	33.422	-36.733	44.920	1.00	44.24
ATOM	10801	CB	LYS	X	122	31.890	-34.264	45.965	1.00	41.97
ATOM	10802	CG	LYS	X	122	30.946	-35.044	45.057	1.00	42.78
ATOM	10803	CD	LYS	X	122	29.485	-34.668	45.344	1.00	46.70
ATOM	10804	CE	LYS	X	122	28.897	-35.550	46.456	1.00	49.93
ATOM	10805	NZ	LYS	X	122	28.747	-36.964	46.020	1.00	51.60
ATOM	10806	N	GLY	X	123	32.331	-37.470	46.750	1.00	39.19
ATOM	10807	CA	GLY	X	123	32.257	-38.839	46.273	1.00	37.24
ATOM	10808	C	GLY	X	123	31.284	-38.882	45.128	1.00	35.66
ATOM	10809	O	GLY	X	123	30.592	-37.901	44.921	1.00	33.90
ATOM	10810	N	PRO	X	124	31.226	-39.967	44.348	1.00	33.45
ATOM	10811	CA	PRO	X	124	30.277	-40.017	43.241	1.00	37.12
ATOM	10812	C	PRO	X	124	28.947	-40.596	43.720	1.00	40.92
ATOM	10813	O	PRO	X	124	28.762	-40.867	44.903	1.00	43.99
ATOM	10814	CB	PRO	X	124	30.948	-40.962	42.271	1.00	35.45
ATOM	10815	CG	PRO	X	124	31.592	-41.959	43.180	1.00	34.31
ATOM	10816	CD	PRO	X	124	32.039	-41.189	44.408	1.00	32.69
ATOM	10817	N	SER	X	125	28.030	-40.790	42.786	1.00	39.81
ATOM	10818	CA	SER	X	125	26.747	-41.397	43.071	1.00	36.84
ATOM	10819	C	SER	X	125	26.813	-42.563	42.111	1.00	35.29
ATOM	10820	O	SER	X	125	27.402	-42.441	41.045	1.00	38.76
ATOM	10821	CB	SER	X	125	25.609	-40.477	42.675	1.00	38.57
ATOM	10822	OG	SER	X	125	25.463	-39.466	43.642	1.00	41.57
ATOM	10823	N	VAL	X	126	26.231	-43.692	42.476	1.00	30.79
ATOM	10824	CA	VAL	X	126	26.253	-44.870	41.618	1.00	24.08
ATOM	10825	C	VAL	X	126	24.830	-45.313	41.312	1.00	24.20
ATOM	10826	O	VAL	X	126	23.961	-45.267	42.168	1.00	27.07
ATOM	10827	CB	VAL	X	126	26.960	-45.978	42.315	1.00	22.07
ATOM	10828	CG1	VAL	X	126	28.358	-45.574	42.556	1.00	15.03
ATOM	10829	CG2	VAL	X	126	26.283	-46.247	43.648	1.00	28.00
ATOM	10830	N	PHE	X	127	24.565	-45.733	40.094	1.00	23.11
ATOM	10831	CA	PHE	X	127	23.205	-46.131	39.781	1.00	26.82
ATOM	10832	C	PHE	X	127	23.195	-47.354	38.902	1.00	29.84
ATOM	10833	O	PHE	X	127	23.857	-47.408	37.880	1.00	35.61
ATOM	10834	CB	PHE	X	127	22.474	-44.965	39.112	1.00	22.46
ATOM	10835	CG	PHE	X	127	22.411	-43.737	39.969	1.00	21.08
ATOM	10836	CD1	PHE	X	127	21.560	-43.700	41.066	1.00	20.37
ATOM	10837	CD2	PHE	X	127	23.225	-42.632	39.702	1.00	22.28
ATOM	10838	CE1	PHE	X	127	21.512	-42.589	41.886	1.00	24.84
ATOM	10839	CE2	PHE	X	127	23.201	-41.489	40.521	1.00	23.42
ATOM	10840	CZ	PHE	X	127	22.345	-41.459	41.614	1.00	27.65
ATOM	10841	N	PRO	X	128	22.414	-48.355	39.267	1.00	31.28
ATOM	10842	CA	PRO	X	128	22.467	-49.501	38.377	1.00	30.00
ATOM	10843	C	PRO	X	128	21.916	-49.121	37.035	1.00	30.95
ATOM	10844	O	PRO	X	128	21.013	-48.305	36.943	1.00	30.51
ATOM	10845	CB	PRO	X	128	21.589	-50.525	39.062	1.00	30.54
ATOM	10846	CG	PRO	X	128	20.631	-49.694	39.848	1.00	32.98
ATOM	10847	CD	PRO	X	128	21.430	-48.529	40.341	1.00	32.43
ATOM	10848	N	LEU	X	129	22.513	-49.697	36.003	1.00	33.48
ATOM	10849	CA	LEU	X	129	22.086	-49.533	34.621	1.00	34.13
ATOM	10850	C	LEU	X	129	21.741	-51.005	34.486	1.00	36.97
ATOM	10851	O	LEU	X	129	22.517	-51.778	33.947	1.00	40.92
ATOM	10852	CB	LEU	X	129	23.266	-49.160	33.710	1.00	30.18
ATOM	10853	CG	LEU	X	129	24.177	-47.986	34.114	1.00	30.06
ATOM	10854	CD1	LEU	X	129	25.438	-48.045	33.309	1.00	28.85
ATOM	10855	CD2	LEU	X	129	23.510	-46.647	33.860	1.00	29.45
ATOM	10856	N	ALA	X	130	20.593	-51.396	35.037	1.00	39.71
ATOM	10857	CA	ALA	X	130	20.196	-52.802	35.042	1.00	36.15
ATOM	10858	C	ALA	X	130	19.671	-53.386	33.758	1.00	33.38

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ATOM	10859	O	ALA X 130	18.997	-52.716	32.970	1.00	32.53
ATOM	10860	CB	ALA X 130	19.188	-53.053	36.141	1.00	37.32
ATOM	10861	N	PRO X 131	19.978	-54.669	33.539	1.00	30.88
ATOM	10862	CA	PRO X 131	19.551	-55.413	32.353	1.00	32.27
ATOM	10863	C	PRO X 131	18.034	-55.413	32.232	1.00	35.45
ATOM	10864	O	PRO X 131	17.305	-55.350	33.221	1.00	38.53
ATOM	10865	CB	PRO X 131	20.111	-56.816	32.575	1.00	26.77
ATOM	10866	CG	PRO X 131	20.473	-56.884	33.969	1.00	22.83
ATOM	10867	CD	PRO X 131	20.793	-55.501	34.432	1.00	26.25
ATOM	10868	N	SER X 132	17.562	-55.480	31.003	1.00	36.64
ATOM	10869	CA	SER X 132	16.143	-55.460	30.740	1.00	38.85
ATOM	10870	C	SER X 132	15.994	-55.823	29.283	1.00	41.48
ATOM	10871	O	SER X 132	16.932	-55.754	28.532	1.00	43.88
ATOM	10872	CB	SER X 132	15.608	-54.059	30.940	1.00	36.44
ATOM	10873	OG	SER X 132	15.796	-53.339	29.740	1.00	28.76
ATOM	10874	N	SER X 133	14.811	-56.207	28.874	1.00	45.63
ATOM	10875	CA	SER X 133	14.614	-56.553	27.491	1.00	49.03
ATOM	10876	C	SER X 133	15.211	-55.436	26.638	1.00	47.22
ATOM	10877	O	SER X 133	15.756	-55.679	25.560	1.00	47.70
ATOM	10878	CB	SER X 133	13.119	-56.660	27.244	1.00	56.20
ATOM	10879	OG	SER X 133	12.409	-55.963	28.269	1.00	62.42
ATOM	10880	N	LYS X 134	15.104	-54.214	27.141	1.00	44.01
ATOM	10881	CA	LYS X 134	15.596	-53.037	26.439	1.00	46.72
ATOM	10882	C	LYS X 134	17.143	-52.933	26.342	1.00	45.65
ATOM	10883	O	LYS X 134	17.692	-52.014	25.705	1.00	42.33
ATOM	10884	CB	LYS X 134	15.004	-51.793	27.110	1.00	50.80
ATOM	10885	CG	LYS X 134	13.743	-52.056	27.971	1.00	56.96
ATOM	10886	CD	LYS X 134	13.776	-51.290	29.326	1.00	57.50
ATOM	10887	CE	LYS X 134	12.856	-51.914	30.375	1.00	55.07
ATOM	10888	NZ	LYS X 134	12.510	-53.348	30.079	1.00	56.44
ATOM	10889	N	SER X 135	17.825	-53.886	26.976	1.00	42.87
ATOM	10890	CA	SER X 135	19.291	-53.961	26.990	1.00	36.07
ATOM	10891	C	SER X 135	19.770	-55.413	26.817	1.00	35.51
ATOM	10892	O	SER X 135	20.794	-55.837	27.375	1.00	30.62
ATOM	10893	CB	SER X 135	19.839	-53.359	28.298	1.00	36.33
ATOM	10894	OG	SER X 135	19.869	-54.275	29.385	1.00	34.22
ATOM	10895	N	THR X 136	19.019	-56.174	26.026	1.00	35.23
ATOM	10896	CA	THR X 136	19.373	-57.562	25.783	1.00	37.15
ATOM	10897	C	THR X 136	19.342	-57.963	24.312	1.00	42.28
ATOM	10898	O	THR X 136	18.434	-58.658	23.843	1.00	46.30
ATOM	10899	CB	THR X 136	18.458	-58.498	26.538	1.00	32.95
ATOM	10900	OG1	THR X 136	18.561	-58.226	27.936	1.00	31.40
ATOM	10901	CG2	THR X 136	18.856	-59.936	26.269	1.00	30.73
ATOM	10902	N	SER X 137	20.353	-57.536	23.579	1.00	42.65
ATOM	10903	CA	SER X 137	20.431	-57.883	22.188	1.00	41.07
ATOM	10904	C	SER X 137	20.830	-59.358	22.115	1.00	39.57
ATOM	10905	O	SER X 137	21.719	-59.824	22.833	1.00	35.23
ATOM	10906	CB	SER X 137	21.459	-56.977	21.535	1.00	45.41
ATOM	10907	OG	SER X 137	20.971	-55.637	21.520	1.00	48.38
ATOM	10908	N	GLY X 138	20.144	-60.102	21.261	1.00	41.40
ATOM	10909	CA	GLY X 138	20.441	-61.517	21.115	1.00	41.66
ATOM	10910	C	GLY X 138	20.589	-62.234	22.435	1.00	41.99
ATOM	10911	O	GLY X 138	19.940	-61.862	23.410	1.00	44.19
ATOM	10912	N	GLY X 139	21.444	-63.256	22.467	1.00	42.24
ATOM	10913	CA	GLY X 139	21.649	-64.028	23.677	1.00	39.95
ATOM	10914	C	GLY X 139	22.366	-63.279	24.781	1.00	37.56
ATOM	10915	O	GLY X 139	22.453	-63.757	25.907	1.00	40.82
ATOM	10916	N	THR X 140	22.842	-62.083	24.479	1.00	34.96
ATOM	10917	CA	THR X 140	23.583	-61.304	25.465	1.00	32.23
ATOM	10918	C	THR X 140	22.850	-60.127	26.104	1.00	30.82

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ATOM	10919	O	THR X 140	22.035	-59.447	25.474	1.00	29.94
ATOM	10920	CB	THR X 140	24.890	-60.768	24.846	1.00	33.98
ATOM	10921	OG1	THR X 140	24.918	-59.334	24.932	1.00	31.79
ATOM	10922	CG2	THR X 140	24.994	-61.202	23.374	1.00	33.44
ATOM	10923	N	ALA X 141	23.184	-59.869	27.363	1.00	28.49
ATOM	10924	CA	ALA X 141	22.567	-58.782	28.100	1.00	28.85
ATOM	10925	C	ALA X 141	23.587	-57.728	28.491	1.00	27.12
ATOM	10926	O	ALA X 141	24.702	-58.067	28.878	1.00	29.23
ATOM	10927	CB	ALA X 141	21.905	-59.342	29.345	1.00	30.02
ATOM	10928	N	ALA X 142	23.209	-56.454	28.412	1.00	22.11
ATOM	10929	CA	ALA X 142	24.119	-55.382	28.794	1.00	20.79
ATOM	10930	C	ALA X 142	23.732	-54.842	30.164	1.00	20.66
ATOM	10931	O	ALA X 142	22.565	-54.715	30.483	1.00	24.48
ATOM	10932	CB	ALA X 142	24.070	-54.257	27.764	1.00	19.80
ATOM	10933	N	LEU X 143	24.707	-54.479	30.969	1.00	18.08
ATOM	10934	CA	LEU X 143	24.392	-53.970	32.282	1.00	15.43
ATOM	10935	C	LEU X 143	25.602	-53.230	32.859	1.00	21.63
ATOM	10936	O	LEU X 143	26.720	-53.469	32.416	1.00	28.83
ATOM	10937	CB	LEU X 143	23.988	-55.172	33.113	1.00	5.15
ATOM	10938	CG	LEU X 143	24.714	-55.841	34.285	1.00	9.06
ATOM	10939	CD1	LEU X 143	24.962	-57.292	33.937	1.00	4.85
ATOM	10940	CD2	LEU X 143	25.983	-55.152	34.670	1.00	11.82
ATOM	10941	N	GLY X 144	25.408	-52.326	33.818	1.00	21.42
ATOM	10942	CA	GLY X 144	26.553	-51.640	34.405	1.00	26.23
ATOM	10943	C	GLY X 144	26.217	-50.526	35.380	1.00	27.81
ATOM	10944	O	GLY X 144	25.044	-50.295	35.622	1.00	33.25
ATOM	10945	N	CYS X 145	27.212	-49.826	35.937	1.00	22.11
ATOM	10946	CA	CYS X 145	26.921	-48.732	36.874	1.00	13.73
ATOM	10947	C	CYS X 145	27.144	-47.341	36.353	1.00	15.33
ATOM	10948	O	CYS X 145	28.059	-47.112	35.575	1.00	23.22
ATOM	10949	CB	CYS X 145	27.761	-48.862	38.098	1.00	9.29
ATOM	10950	SG	CYS X 145	27.427	-50.471	38.783	1.00	16.51
ATOM	10951	N	LEU X 146	26.323	-46.401	36.798	1.00	10.96
ATOM	10952	CA	LEU X 146	26.472	-45.025	36.392	1.00	6.79
ATOM	10953	C	LEU X 146	26.990	-44.258	37.603	1.00	10.79
ATOM	10954	O	LEU X 146	26.250	-43.975	38.523	1.00	10.72
ATOM	10955	CB	LEU X 146	25.148	-44.470	35.913	1.00	2.00
ATOM	10956	CG	LEU X 146	25.083	-42.958	35.995	1.00	2.00
ATOM	10957	CD1	LEU X 146	26.416	-42.374	35.611	1.00	8.29
ATOM	10958	CD2	LEU X 146	23.987	-42.433	35.089	1.00	2.00
ATOM	10959	N	VAL X 147	28.281	-43.932	37.571	1.00	15.78
ATOM	10960	CA	VAL X 147	28.980	-43.231	38.632	1.00	13.60
ATOM	10961	C	VAL X 147	28.874	-41.741	38.384	1.00	18.56
ATOM	10962	O	VAL X 147	29.732	-41.176	37.697	1.00	16.33
ATOM	10963	CB	VAL X 147	30.429	-43.684	38.624	1.00	11.34
ATOM	10964	CG1	VAL X 147	31.166	-43.142	39.814	1.00	18.51
ATOM	10965	CG2	VAL X 147	30.451	-45.201	38.666	1.00	2.00
ATOM	10966	N	LYS X 148	27.815	-41.133	38.948	1.00	25.42
ATOM	10967	CA	LYS X 148	27.475	-39.691	38.820	1.00	31.77
ATOM	10968	C	LYS X 148	27.943	-38.686	39.864	1.00	36.19
ATOM	10969	O	LYS X 148	28.024	-38.991	41.058	1.00	37.26
ATOM	10970	CB	LYS X 148	25.979	-39.495	38.717	1.00	30.95
ATOM	10971	CG	LYS X 148	25.530	-39.144	37.355	1.00	33.38
ATOM	10972	CD	LYS X 148	25.548	-37.667	37.209	1.00	37.54
ATOM	10973	CE	LYS X 148	24.149	-37.116	37.018	1.00	38.22
ATOM	10974	NZ	LYS X 148	23.650	-36.629	38.323	1.00	43.35
ATOM	10975	N	ASP X 149	28.220	-37.474	39.367	1.00	38.64
ATOM	10976	CA	ASP X 149	28.726	-36.321	40.121	1.00	40.18
ATOM	10977	C	ASP X 149	29.713	-36.523	41.247	1.00	43.89
ATOM	10978	O	ASP X 149	29.316	-36.684	42.394	1.00	46.55

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ATOM	10979	CB	ASP	X	149	27.572	-35.534	40.651	1.00	39.63
ATOM	10980	CG	ASP	X	149	26.402	-35.650	39.768	1.00	46.99
ATOM	10981	OD1	ASP	X	149	26.586	-35.377	38.560	1.00	49.05
ATOM	10982	OD2	ASP	X	149	25.319	-36.030	40.267	1.00	49.84
ATOM	10983	N	TYR	X	150	31.005	-36.475	40.916	1.00	45.19
ATOM	10984	CA	TYR	X	150	32.076	-36.613	41.894	1.00	44.69
ATOM	10985	C	TYR	X	150	33.158	-35.647	41.431	1.00	42.93
ATOM	10986	O	TYR	X	150	33.033	-35.036	40.362	1.00	41.55
ATOM	10987	CB	TYR	X	150	32.602	-38.051	41.944	1.00	45.51
ATOM	10988	CG	TYR	X	150	33.131	-38.546	40.636	1.00	48.71
ATOM	10989	CD1	TYR	X	150	34.439	-38.986	40.529	1.00	48.93
ATOM	10990	CD2	TYR	X	150	32.340	-38.541	39.490	1.00	47.36
ATOM	10991	CE1	TYR	X	150	34.948	-39.401	39.324	1.00	47.82
ATOM	10992	CE2	TYR	X	150	32.848	-38.958	38.277	1.00	46.07
ATOM	10993	CZ	TYR	X	150	34.150	-39.385	38.208	1.00	45.54
ATOM	10994	OH	TYR	X	150	34.658	-39.828	37.025	1.00	45.92
ATOM	10995	N	PHE	X	151	34.204	-35.485	42.229	1.00	42.26
ATOM	10996	CA	PHE	X	151	35.272	-34.569	41.859	1.00	40.34
ATOM	10997	C	PHE	X	151	36.416	-34.656	42.833	1.00	38.24
ATOM	10998	O	PHE	X	151	36.195	-34.750	44.022	1.00	39.41
ATOM	10999	CB	PHE	X	151	34.722	-33.153	41.852	1.00	39.54
ATOM	11000	CG	PHE	X	151	35.728	-32.104	41.493	1.00	41.92
ATOM	11001	CD1	PHE	X	151	36.871	-31.916	42.261	1.00	40.34
ATOM	11002	CD2	PHE	X	151	35.493	-31.244	40.419	1.00	41.94
ATOM	11003	CE1	PHE	X	151	37.756	-30.889	41.969	1.00	40.76
ATOM	11004	CE2	PHE	X	151	36.370	-30.222	40.128	1.00	40.79
ATOM	11005	CZ	PHE	X	151	37.505	-30.040	40.904	1.00	40.45
ATOM	11006	N	PRO	X	152	37.661	-34.673	42.342	1.00	38.19
ATOM	11007	CA	PRO	X	152	38.130	-34.616	40.955	1.00	37.59
ATOM	11008	C	PRO	X	152	38.316	-36.038	40.495	1.00	36.83
ATOM	11009	O	PRO	X	152	37.983	-36.942	41.233	1.00	40.93
ATOM	11010	CB	PRO	X	152	39.465	-33.935	41.086	1.00	39.10
ATOM	11011	CG	PRO	X	152	39.986	-34.476	42.374	1.00	38.76
ATOM	11012	CD	PRO	X	152	38.800	-34.673	43.276	1.00	38.63
ATOM	11013	N	GLU	X	153	38.841	-36.254	39.293	1.00	36.91
ATOM	11014	CA	GLU	X	153	39.087	-37.623	38.856	1.00	30.12
ATOM	11015	C	GLU	X	153	40.181	-38.093	39.797	1.00	27.69
ATOM	11016	O	GLU	X	153	40.799	-37.313	40.518	1.00	30.29
ATOM	11017	CB	GLU	X	153	39.570	-37.658	37.416	1.00	30.86
ATOM	11018	CG	GLU	X	153	38.483	-37.422	36.397	1.00	37.77
ATOM	11019	CD	GLU	X	153	38.344	-38.592	35.432	1.00	48.45
ATOM	11020	OE1	GLU	X	153	38.422	-38.352	34.211	1.00	56.31
ATOM	11021	OE2	GLU	X	153	38.162	-39.752	35.880	1.00	46.83
ATOM	11022	N	PRO	X	154	40.417	-39.377	39.848	1.00	24.62
ATOM	11023	CA	PRO	X	154	39.757	-40.453	39.147	1.00	29.45
ATOM	11024	C	PRO	X	154	38.868	-41.304	40.076	1.00	32.19
ATOM	11025	O	PRO	X	154	39.060	-41.366	41.310	1.00	29.98
ATOM	11026	CB	PRO	X	154	40.941	-41.245	38.647	1.00	29.87
ATOM	11027	CG	PRO	X	154	41.934	-41.120	39.854	1.00	26.50
ATOM	11028	CD	PRO	X	154	41.518	-39.900	40.655	1.00	24.21
ATOM	11029	N	VAL	X	155	37.890	-41.962	39.471	1.00	30.91
ATOM	11030	CA	VAL	X	155	37.027	-42.830	40.216	1.00	32.58
ATOM	11031	C	VAL	X	155	37.334	-44.135	39.583	1.00	32.57
ATOM	11032	O	VAL	X	155	37.035	-44.347	38.417	1.00	37.16
ATOM	11033	CB	VAL	X	155	35.556	-42.544	39.964	1.00	39.36
ATOM	11034	CG1	VAL	X	155	35.314	-42.298	38.459	1.00	43.82
ATOM	11035	CG2	VAL	X	155	34.718	-43.736	40.444	1.00	44.40
ATOM	11036	N	THR	X	156	37.961	-45.017	40.320	1.00	31.60
ATOM	11037	CA	THR	X	156	38.247	-46.302	39.738	1.00	33.84
ATOM	11038	C	THR	X	156	37.012	-47.200	39.877	1.00	36.27

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ATOM	11039	O	THR X	156	36.327	-47.135	40.882	1.00	39.72
ATOM	11040	CB	THR X	156	39.462	-46.928	40.401	1.00	31.79
ATOM	11041	OG1	THR X	156	39.653	-48.249	39.882	1.00	40.49
ATOM	11042	CG2	THR X	156	39.306	-46.960	41.863	1.00	26.37
ATOM	11043	N	VAL X	157	36.720	-48.027	38.875	1.00	36.38
ATOM	11044	CA	VAL X	157	35.549	-48.903	38.906	1.00	32.90
ATOM	11045	C	VAL X	157	35.907	-50.325	38.558	1.00	32.45
ATOM	11046	O	VAL X	157	36.494	-50.580	37.523	1.00	34.32
ATOM	11047	CB	VAL X	157	34.496	-48.440	37.883	1.00	33.13
ATOM	11048	CG1	VAL X	157	33.297	-49.350	37.901	1.00	33.40
ATOM	11049	CG2	VAL X	157	34.092	-47.026	38.169	1.00	33.33
ATOM	11050	N	SER X	158	35.514	-51.259	39.400	1.00	34.37
ATOM	11051	CA	SER X	158	35.802	-52.653	39.141	1.00	36.10
ATOM	11052	C	SER X	158	34.567	-53.529	39.281	1.00	36.70
ATOM	11053	O	SER X	158	33.636	-53.176	39.971	1.00	41.08
ATOM	11054	CB	SER X	158	36.837	-53.138	40.123	1.00	36.01
ATOM	11055	OG	SER X	158	36.452	-54.414	40.588	1.00	42.18
ATOM	11056	N	TRP X	159	34.569	-54.688	38.651	1.00	35.57
ATOM	11057	CA	TRP X	159	33.436	-55.582	38.758	1.00	34.76
ATOM	11058	C	TRP X	159	33.732	-56.863	39.511	1.00	38.11
ATOM	11059	O	TRP X	159	34.797	-57.458	39.353	1.00	37.24
ATOM	11060	CB	TRP X	159	32.943	-55.919	37.378	1.00	33.95
ATOM	11061	CG	TRP X	159	32.250	-54.804	36.780	1.00	29.65
ATOM	11062	CD1	TRP X	159	32.799	-53.816	36.066	1.00	30.34
ATOM	11063	CD2	TRP X	159	30.855	-54.545	36.841	1.00	32.35
ATOM	11064	NE1	TRP X	159	31.843	-52.936	35.658	1.00	32.96
ATOM	11065	CE2	TRP X	159	30.627	-53.355	36.126	1.00	34.38
ATOM	11066	CE3	TRP X	159	29.768	-55.200	37.433	1.00	31.45
ATOM	11067	CZ2	TRP X	159	29.353	-52.789	35.980	1.00	36.77
ATOM	11068	CZ3	TRP X	159	28.513	-54.656	37.295	1.00	33.82
ATOM	11069	CH2	TRP X	159	28.310	-53.451	36.569	1.00	38.30
ATOM	11070	N	ASN X	160	32.740	-57.305	40.284	1.00	43.02
ATOM	11071	CA	ASN X	160	32.841	-58.504	41.115	1.00	42.16
ATOM	11072	C	ASN X	160	34.229	-58.563	41.647	1.00	42.80
ATOM	11073	O	ASN X	160	34.933	-59.514	41.394	1.00	40.56
ATOM	11074	CB	ASN X	160	32.539	-59.758	40.312	1.00	37.28
ATOM	11075	CG	ASN X	160	31.092	-59.850	39.970	1.00	34.82
ATOM	11076	OD1	ASN X	160	30.301	-59.056	40.471	1.00	31.49
ATOM	11077	ND2	ASN X	160	30.723	-60.802	39.120	1.00	34.67
ATOM	11078	N	SER X	161	34.599	-57.508	42.371	1.00	46.25
ATOM	11079	CA	SER X	161	35.910	-57.355	42.970	1.00	48.22
ATOM	11080	C	SER X	161	37.001	-58.116	42.223	1.00	50.04
ATOM	11081	O	SER X	161	37.618	-59.042	42.776	1.00	49.59
ATOM	11082	CB	SER X	161	35.837	-57.812	44.418	1.00	49.73
ATOM	11083	OG	SER X	161	34.526	-57.628	44.919	1.00	48.84
ATOM	11084	N	GLY X	162	37.207	-57.736	40.959	1.00	50.23
ATOM	11085	CA	GLY X	162	38.227	-58.364	40.130	1.00	48.84
ATOM	11086	C	GLY X	162	37.803	-59.508	39.223	1.00	47.58
ATOM	11087	O	GLY X	162	37.975	-59.431	38.017	1.00	49.24
ATOM	11088	N	ALA X	163	37.241	-60.568	39.790	1.00	47.68
ATOM	11089	CA	ALA X	163	36.817	-61.730	39.012	1.00	49.17
ATOM	11090	C	ALA X	163	36.249	-61.382	37.629	1.00	48.67
ATOM	11091	O	ALA X	163	36.622	-62.012	36.626	1.00	51.82
ATOM	11092	CB	ALA X	163	35.786	-62.544	39.815	1.00	51.03
ATOM	11093	N	LEU X	164	35.341	-60.405	37.575	1.00	42.86
ATOM	11094	CA	LEU X	164	34.762	-60.016	36.305	1.00	38.93
ATOM	11095	C	LEU X	164	35.576	-58.925	35.665	1.00	40.10
ATOM	11096	O	LEU X	164	35.593	-57.788	36.146	1.00	37.29
ATOM	11097	CB	LEU X	164	33.332	-59.531	36.476	1.00	36.11
ATOM	11098	CG	LEU X	164	32.488	-59.565	35.206	1.00	31.11

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ATOM	11099	CD1	LEU	X	164	32.571	-60.913	34.595	1.00	30.63
ATOM	11100	CD2	LEU	X	164	31.050	-59.297	35.547	1.00	36.07
ATOM	11101	N	THR	X	165	36.250	-59.289	34.576	1.00	42.85
ATOM	11102	CA	THR	X	165	37.071	-58.352	33.824	1.00	42.66
ATOM	11103	C	THR	X	165	36.892	-58.598	32.361	1.00	42.29
ATOM	11104	O	THR	X	165	37.698	-58.137	31.570	1.00	45.45
ATOM	11105	CB	THR	X	165	38.543	-58.524	34.080	1.00	41.51
ATOM	11106	OG1	THR	X	165	38.822	-59.909	34.318	1.00	46.93
ATOM	11107	CG2	THR	X	165	38.957	-57.704	35.255	1.00	48.27
ATOM	11108	N	SER	X	166	35.863	-59.344	31.990	1.00	40.08
ATOM	11109	CA	SER	X	166	35.641	-59.592	30.588	1.00	40.13
ATOM	11110	C	SER	X	166	34.366	-58.941	30.117	1.00	36.00
ATOM	11111	O	SER	X	166	33.308	-59.110	30.700	1.00	39.32
ATOM	11112	CB	SER	X	166	35.590	-61.087	30.298	1.00	46.14
ATOM	11113	OG	SER	X	166	35.297	-61.306	28.924	1.00	54.00
ATOM	11114	N	GLY	X	167	34.461	-58.192	29.045	1.00	31.12
ATOM	11115	CA	GLY	X	167	33.271	-57.559	28.549	1.00	29.61
ATOM	11116	C	GLY	X	167	33.081	-56.216	29.183	1.00	25.21
ATOM	11117	O	GLY	X	167	32.202	-55.464	28.809	1.00	30.05
ATOM	11118	N	VAL	X	168	33.909	-55.897	30.149	1.00	21.16
ATOM	11119	CA	VAL	X	168	33.768	-54.611	30.780	1.00	22.00
ATOM	11120	C	VAL	X	168	34.256	-53.524	29.847	1.00	20.52
ATOM	11121	O	VAL	X	168	35.189	-53.728	29.101	1.00	29.54
ATOM	11122	CB	VAL	X	168	34.589	-54.546	32.052	1.00	20.48
ATOM	11123	CG1	VAL	X	168	34.230	-53.341	32.815	1.00	22.93
ATOM	11124	CG2	VAL	X	168	34.345	-55.771	32.877	1.00	24.18
ATOM	11125	N	HIS	X	169	33.596	-52.385	29.852	1.00	18.34
ATOM	11126	CA	HIS	X	169	34.010	-51.239	29.062	1.00	17.72
ATOM	11127	C	HIS	X	169	33.700	-50.122	30.058	1.00	18.75
ATOM	11128	O	HIS	X	169	32.550	-49.703	30.177	1.00	23.08
ATOM	11129	CB	HIS	X	169	33.146	-50.985	27.801	1.00	16.77
ATOM	11130	CG	HIS	X	169	33.142	-52.092	26.793	1.00	23.29
ATOM	11131	ND1	HIS	X	169	34.215	-52.357	25.979	1.00	26.89
ATOM	11132	CD2	HIS	X	169	32.174	-52.974	26.435	1.00	33.94
ATOM	11133	CE1	HIS	X	169	33.911	-53.354	25.159	1.00	34.61
ATOM	11134	NE2	HIS	X	169	32.671	-53.752	25.416	1.00	25.39
ATOM	11135	N	THR	X	170	34.684	-49.649	30.806	1.00	16.92
ATOM	11136	CA	THR	X	170	34.394	-48.551	31.719	1.00	12.90
ATOM	11137	C	THR	X	170	34.834	-47.245	31.034	1.00	11.54
ATOM	11138	O	THR	X	170	36.007	-46.985	30.858	1.00	7.53
ATOM	11139	CB	THR	X	170	35.086	-48.715	33.092	1.00	11.83
ATOM	11140	OG1	THR	X	170	35.420	-47.424	33.574	1.00	10.36
ATOM	11141	CG2	THR	X	170	36.353	-49.519	33.026	1.00	15.69
ATOM	11142	N	PHE	X	171	33.863	-46.446	30.619	1.00	13.65
ATOM	11143	CA	PHE	X	171	34.109	-45.201	29.904	1.00	13.64
ATOM	11144	C	PHE	X	171	34.922	-44.127	30.577	1.00	17.74
ATOM	11145	O	PHE	X	171	35.048	-44.090	31.795	1.00	17.91
ATOM	11146	CB	PHE	X	171	32.792	-44.582	29.486	1.00	8.49
ATOM	11147	CG	PHE	X	171	32.019	-45.433	28.569	1.00	9.61
ATOM	11148	CD1	PHE	X	171	31.250	-46.465	29.053	1.00	5.88
ATOM	11149	CD2	PHE	X	171	32.101	-45.238	27.195	1.00	15.90
ATOM	11150	CE1	PHE	X	171	30.570	-47.308	28.171	1.00	14.74
ATOM	11151	CE2	PHE	X	171	31.418	-46.084	26.285	1.00	16.24
ATOM	11152	CZ	PHE	X	171	30.655	-47.115	26.774	1.00	13.52
ATOM	11153	N	PRO	X	172	35.513	-43.230	29.767	1.00	23.05
ATOM	11154	CA	PRO	X	172	36.319	-42.127	30.278	1.00	23.87
ATOM	11155	C	PRO	X	172	35.380	-41.100	30.883	1.00	25.97
ATOM	11156	O	PRO	X	172	34.264	-40.873	30.371	1.00	25.11
ATOM	11157	CB	PRO	X	172	36.994	-41.575	29.032	1.00	17.99
ATOM	11158	CG	PRO	X	172	36.070	-41.872	27.968	1.00	16.63



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ATOM	11159	CD	PRO X	172	35.502	-43.219	28.294	1.00	21.37
ATOM	11160	N	ALA X	173	35.845	-40.449	31.946	1.00	27.63
ATOM	11161	CA	ALA X	173	35.028	-39.430	32.608	1.00	28.54
ATOM	11162	C	ALA X	173	34.658	-38.277	31.670	1.00	26.41
ATOM	11163	O	ALA X	173	35.364	-37.980	30.712	1.00	28.19
ATOM	11164	CB	ALA X	173	35.756	-38.875	33.807	1.00	25.48
ATOM	11165	N	VAL X	174	33.540	-37.636	31.935	1.00	25.25
ATOM	11166	CA	VAL X	174	33.135	-36.502	31.126	1.00	31.82
ATOM	11167	C	VAL X	174	32.519	-35.442	32.013	1.00	34.51
ATOM	11168	O	VAL X	174	31.450	-35.627	32.600	1.00	37.67
ATOM	11169	CB	VAL X	174	32.127	-36.879	30.031	1.00	30.69
ATOM	11170	CG1	VAL X	174	31.253	-35.686	29.705	1.00	28.24
ATOM	11171	CG2	VAL X	174	32.863	-37.323	28.784	1.00	35.33
ATOM	11172	N	LEU X	175	33.221	-34.326	32.108	1.00	35.92
ATOM	11173	CA	LEU X	175	32.779	-33.212	32.913	1.00	32.95
ATOM	11174	C	LEU X	175	31.446	-32.717	32.423	1.00	35.89
ATOM	11175	O	LEU X	175	31.382	-31.987	31.436	1.00	37.57
ATOM	11176	CB	LEU X	175	33.781	-32.071	32.831	1.00	26.08
ATOM	11177	CG	LEU X	175	33.790	-31.042	33.947	1.00	14.42
ATOM	11178	CD1	LEU X	175	33.447	-31.612	35.261	1.00	25.54
ATOM	11179	CD2	LEU X	175	35.152	-30.561	34.083	1.00	31.80
ATOM	11180	N	GLN X	176	30.376	-33.116	33.100	1.00	36.96
ATOM	11181	CA	GLN X	176	29.060	-32.631	32.710	1.00	37.02
ATOM	11182	C	GLN X	176	29.045	-31.192	33.153	1.00	36.52
ATOM	11183	O	GLN X	176	29.948	-30.760	33.884	1.00	32.00
ATOM	11184	CB	GLN X	176	27.950	-33.352	33.451	1.00	34.83
ATOM	11185	CG	GLN X	176	28.241	-33.509	34.911	1.00	33.34
ATOM	11186	CD	GLN X	176	27.749	-34.831	35.395	1.00	33.81
ATOM	11187	OE1	GLN X	176	26.776	-35.351	34.855	1.00	30.42
ATOM	11188	NE2	GLN X	176	28.417	-35.401	36.397	1.00	35.04
ATOM	11189	N	SER X	177	28.024	-30.453	32.713	1.00	37.10
ATOM	11190	CA	SER X	177	27.894	-29.063	33.109	1.00	36.94
ATOM	11191	C	SER X	177	27.945	-29.077	34.617	1.00	38.31
ATOM	11192	O	SER X	177	28.241	-30.120	35.205	1.00	42.61
ATOM	11193	CB	SER X	177	26.583	-28.469	32.661	1.00	33.24
ATOM	11194	OG	SER X	177	26.376	-27.315	33.437	1.00	34.89
ATOM	11195	N	SER X	178	27.658	-27.963	35.277	1.00	33.95
ATOM	11196	CA	SER X	178	27.776	-28.019	36.719	1.00	36.44
ATOM	11197	C	SER X	178	29.273	-28.267	36.871	1.00	39.31
ATOM	11198	O	SER X	178	29.987	-28.131	35.902	1.00	46.00
ATOM	11199	CB	SER X	178	26.974	-29.208	37.242	1.00	34.53
ATOM	11200	OG	SER X	178	27.807	-30.287	37.613	1.00	32.78
ATOM	11201	N	GLY X	179	29.787	-28.669	38.017	1.00	40.24
ATOM	11202	CA	GLY X	179	31.234	-28.854	38.037	1.00	43.27
ATOM	11203	C	GLY X	179	31.823	-30.262	38.119	1.00	45.45
ATOM	11204	O	GLY X	179	33.038	-30.451	37.965	1.00	44.07
ATOM	11205	N	LEU X	180	30.963	-31.250	38.355	1.00	46.96
ATOM	11206	CA	LEU X	180	31.383	-32.630	38.549	1.00	44.00
ATOM	11207	C	LEU X	180	31.393	-33.551	37.357	1.00	41.47
ATOM	11208	O	LEU X	180	30.706	-33.318	36.363	1.00	38.87
ATOM	11209	CB	LEU X	180	30.523	-33.229	39.658	1.00	46.96
ATOM	11210	CG	LEU X	180	29.675	-32.253	40.484	1.00	39.14
ATOM	11211	CD1	LEU X	180	28.330	-32.021	39.845	1.00	33.52
ATOM	11212	CD2	LEU X	180	29.501	-32.831	41.864	1.00	41.44
ATOM	11213	N	TYR X	181	32.174	-34.616	37.503	1.00	41.79
ATOM	11214	CA	TYR X	181	32.364	-35.622	36.467	1.00	45.04
ATOM	11215	C	TYR X	181	31.347	-36.736	36.546	1.00	44.69
ATOM	11216	O	TYR X	181	30.769	-36.961	37.599	1.00	49.19
ATOM	11217	CB	TYR X	181	33.776	-36.223	36.597	1.00	46.21
ATOM	11218	CG	TYR X	181	34.875	-35.223	36.317	1.00	46.36

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ATOM	11219	CD1	TYR	X	181	34.975	-34.607	35.072	1.00	44.29
ATOM	11220	CD2	TYR	X	181	35.743	-34.813	37.327	1.00	47.32
ATOM	11221	CE1	TYR	X	181	35.892	-33.611	34.849	1.00	44.67
ATOM	11222	CE2	TYR	X	181	36.671	-33.811	37.113	1.00	46.58
ATOM	11223	CZ	TYR	X	181	36.737	-33.211	35.873	1.00	46.93
ATOM	11224	OH	TYR	X	181	37.651	-32.202	35.658	1.00	49.25
ATOM	11225	N	SER	X	182	31.147	-37.449	35.443	1.00	40.58
ATOM	11226	CA	SER	X	182	30.223	-38.573	35.440	1.00	39.41
ATOM	11227	C	SER	X	182	30.570	-39.675	34.410	1.00	39.77
ATOM	11228	O	SER	X	182	30.403	-39.513	33.210	1.00	43.50
ATOM	11229	CB	SER	X	182	28.807	-38.075	35.212	1.00	36.55
ATOM	11230	OG	SER	X	182	27.957	-39.171	34.936	1.00	35.94
ATOM	11231	N	LEU	X	183	31.070	-40.805	34.877	1.00	37.43
ATOM	11232	CA	LEU	X	183	31.410	-41.885	33.970	1.00	32.60
ATOM	11233	C	LEU	X	183	30.526	-43.089	34.267	1.00	33.58
ATOM	11234	O	LEU	X	183	30.035	-43.247	35.380	1.00	33.30
ATOM	11235	CB	LEU	X	183	32.888	-42.250	34.155	1.00	28.63
ATOM	11236	CG	LEU	X	183	33.368	-43.048	35.377	1.00	20.42
ATOM	11237	CD1	LEU	X	183	32.841	-44.461	35.309	1.00	18.15
ATOM	11238	CD2	LEU	X	183	34.871	-43.077	35.399	1.00	22.51
ATOM	11239	N	SER	X	184	30.347	-43.947	33.276	1.00	32.61
ATOM	11240	CA	SER	X	184	29.537	-45.142	33.431	1.00	29.75
ATOM	11241	C	SER	X	184	30.387	-46.371	33.092	1.00	26.49
ATOM	11242	O	SER	X	184	31.043	-46.417	32.063	1.00	26.83
ATOM	11243	CB	SER	X	184	28.331	-45.044	32.492	1.00	32.26
ATOM	11244	OG	SER	X	184	27.119	-45.415	33.130	1.00	36.98
ATOM	11245	N	SER	X	185	30.391	-47.367	33.954	1.00	23.40
ATOM	11246	CA	SER	X	185	31.164	-48.569	33.680	1.00	24.81
ATOM	11247	C	SER	X	185	30.134	-49.612	33.275	1.00	27.71
ATOM	11248	O	SER	X	185	29.166	-49.829	34.017	1.00	28.44
ATOM	11249	CB	SER	X	185	31.913	-49.034	34.933	1.00	21.34
ATOM	11250	OG	SER	X	185	32.897	-49.998	34.599	1.00	13.15
ATOM	11251	N	VAL	X	186	30.338	-50.256	32.121	1.00	25.50
ATOM	11252	CA	VAL	X	186	29.392	-51.245	31.633	1.00	22.34
ATOM	11253	C	VAL	X	186	30.020	-52.553	31.257	1.00	22.59
ATOM	11254	O	VAL	X	186	31.186	-52.602	30.935	1.00	25.13
ATOM	11255	CB	VAL	X	186	28.644	-50.719	30.443	1.00	21.47
ATOM	11256	CG1	VAL	X	186	27.947	-51.845	29.722	1.00	27.00
ATOM	11257	CG2	VAL	X	186	27.648	-49.737	30.906	1.00	26.90
ATOM	11258	N	VAL	X	187	29.224	-53.614	31.290	1.00	22.71
ATOM	11259	CA	VAL	X	187	29.700	-54.949	30.971	1.00	19.55
ATOM	11260	C	VAL	X	187	28.616	-55.761	30.322	1.00	18.53
ATOM	11261	O	VAL	X	187	27.444	-55.606	30.624	1.00	20.33
ATOM	11262	CB	VAL	X	187	30.106	-55.703	32.197	1.00	17.78
ATOM	11263	CG1	VAL	X	187	29.029	-55.555	33.251	1.00	16.54
ATOM	11264	CG2	VAL	X	187	30.332	-57.174	31.823	1.00	20.30
ATOM	11265	N	THR	X	188	28.997	-56.615	29.397	1.00	14.77
ATOM	11266	CA	THR	X	188	27.998	-57.413	28.760	1.00	15.35
ATOM	11267	C	THR	X	188	28.242	-58.846	29.192	1.00	19.51
ATOM	11268	O	THR	X	188	29.378	-59.331	29.201	1.00	22.30
ATOM	11269	CB	THR	X	188	28.051	-57.217	27.229	1.00	7.71
ATOM	11270	OG1	THR	X	188	29.229	-57.811	26.699	1.00	17.12
ATOM	11271	CG2	THR	X	188	28.112	-55.770	26.900	1.00	2.10
ATOM	11272	N	VAL	X	189	27.162	-59.499	29.595	1.00	21.00
ATOM	11273	CA	VAL	X	189	27.213	-60.863	30.061	1.00	17.57
ATOM	11274	C	VAL	X	189	26.131	-61.612	29.338	1.00	19.94
ATOM	11275	O	VAL	X	189	25.217	-61.023	28.744	1.00	18.19
ATOM	11276	CB	VAL	X	189	26.948	-60.920	31.558	1.00	15.91
ATOM	11277	CG1	VAL	X	189	27.868	-59.956	32.262	1.00	14.15
ATOM	11278	CG2	VAL	X	189	25.513	-60.517	31.850	1.00	17.39

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ATOM	11279	N	PRO X 190	26.221	-62.931	29.370	1.00	21.21
ATOM	11280	CA	PRO X 190	25.215	-63.732	28.697	1.00	25.79
ATOM	11281	C	PRO X 190	23.925	-63.514	29.447	1.00	32.14
ATOM	11282	O	PRO X 190	23.918	-63.428	30.676	1.00	29.10
ATOM	11283	CB	PRO X 190	25.731	-65.157	28.828	1.00	24.21
ATOM	11284	CG	PRO X 190	27.132	-65.034	29.273	1.00	25.11
ATOM	11285	CD	PRO X 190	27.231	-63.759	30.029	1.00	25.26
ATOM	11286	N	SER X 191	22.843	-63.396	28.687	1.00	38.50
ATOM	11287	CA	SER X 191	21.532	-63.178	29.253	1.00	39.85
ATOM	11288	C	SER X 191	21.220	-64.301	30.186	1.00	40.76
ATOM	11289	O	SER X 191	20.913	-64.085	31.355	1.00	42.74
ATOM	11290	CB	SER X 191	20.479	-63.121	28.154	1.00	39.60
ATOM	11291	OG	SER X 191	19.852	-61.856	28.200	1.00	43.05
ATOM	11292	N	SER X 192	21.313	-65.513	29.668	1.00	40.86
ATOM	11293	CA	SER X 192	21.007	-66.684	30.467	1.00	42.81
ATOM	11294	C	SER X 192	21.682	-66.695	31.831	1.00	43.09
ATOM	11295	O	SER X 192	21.326	-67.484	32.706	1.00	45.11
ATOM	11296	CB	SER X 192	21.404	-67.929	29.707	1.00	43.74
ATOM	11297	OG	SER X 192	22.568	-68.473	30.286	1.00	45.04
ATOM	11298	N	SER X 193	22.656	-65.817	32.013	1.00	42.76
ATOM	11299	CA	SER X 193	23.375	-65.749	33.279	1.00	41.76
ATOM	11300	C	SER X 193	22.620	-65.047	34.397	1.00	39.98
ATOM	11301	O	SER X 193	22.537	-65.565	35.499	1.00	36.46
ATOM	11302	CB	SER X 193	24.741	-65.063	33.081	1.00	45.25
ATOM	11303	OG	SER X 193	24.638	-63.642	33.029	1.00	46.09
ATOM	11304	N	LEU X 194	22.066	-63.875	34.091	1.00	42.42
ATOM	11305	CA	LEU X 194	21.363	-63.046	35.058	1.00	44.45
ATOM	11306	C	LEU X 194	20.705	-63.811	36.182	1.00	47.29
ATOM	11307	O	LEU X 194	20.537	-63.270	37.272	1.00	47.44
ATOM	11308	CB	LEU X 194	20.331	-62.183	34.340	1.00	41.98
ATOM	11309	CG	LEU X 194	20.954	-61.280	33.286	1.00	39.38
ATOM	11310	CD1	LEU X 194	20.178	-61.398	31.997	1.00	40.70
ATOM	11311	CD2	LEU X 194	20.975	-59.850	33.800	1.00	37.44
ATOM	11312	N	GLY X 195	20.342	-65.065	35.919	1.00	49.80
ATOM	11313	CA	GLY X 195	19.695	-65.881	36.930	1.00	52.58
ATOM	11314	C	GLY X 195	20.624	-66.528	37.939	1.00	52.54
ATOM	11315	O	GLY X 195	20.509	-66.307	39.140	1.00	52.63
ATOM	11316	N	THR X 196	21.538	-67.347	37.448	1.00	53.03
ATOM	11317	CA	THR X 196	22.469	-68.034	38.315	1.00	53.49
ATOM	11318	C	THR X 196	23.641	-67.178	38.740	1.00	54.97
ATOM	11319	O	THR X 196	24.327	-67.514	39.701	1.00	57.61
ATOM	11320	CB	THR X 196	23.045	-69.233	37.632	1.00	54.02
ATOM	11321	OG1	THR X 196	24.379	-68.909	37.228	1.00	55.91
ATOM	11322	CG2	THR X 196	22.183	-69.631	36.394	1.00	54.61
ATOM	11323	N	GLN X 197	23.866	-66.075	38.033	1.00	55.12
ATOM	11324	CA	GLN X 197	24.983	-65.183	38.340	1.00	56.63
ATOM	11325	C	GLN X 197	24.625	-63.800	38.906	1.00	54.70
ATOM	11326	O	GLN X 197	23.662	-63.158	38.475	1.00	58.10
ATOM	11327	CB	GLN X 197	25.841	-64.987	37.076	1.00	61.66
ATOM	11328	CG	GLN X 197	27.219	-65.633	37.111	1.00	62.58
ATOM	11329	CD	GLN X 197	28.155	-64.970	38.114	1.00	65.11
ATOM	11330	OE1	GLN X 197	27.733	-64.432	39.147	1.00	65.69
ATOM	11331	NE2	GLN X 197	29.438	-65.013	37.814	1.00	67.08
ATOM	11332	N	THR X 198	25.442	-63.324	39.839	1.00	50.72
ATOM	11333	CA	THR X 198	25.227	-62.011	40.438	1.00	48.29
ATOM	11334	C	THR X 198	26.345	-61.088	39.981	1.00	45.98
ATOM	11335	O	THR X 198	27.399	-61.561	39.579	1.00	51.20
ATOM	11336	CB	THR X 198	25.315	-62.067	41.923	1.00	47.98
ATOM	11337	OG1	THR X 198	25.275	-60.735	42.441	1.00	45.58
ATOM	11338	CG2	THR X 198	26.617	-62.707	42.315	1.00	52.34

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ATOM	11339	N	TYR	X	199	26.136	-59.783	40.050	1.00	37.06
ATOM	11340	CA	TYR	X	199	27.163	-58.857	39.626	1.00	29.42
ATOM	11341	C	TYR	X	199	27.189	-57.637	40.509	1.00	32.08
ATOM	11342	O	TYR	X	199	26.142	-57.112	40.863	1.00	37.72
ATOM	11343	CB	TYR	X	199	26.888	-58.378	38.211	1.00	25.81
ATOM	11344	CG	TYR	X	199	26.886	-59.444	37.167	1.00	17.31
ATOM	11345	CD1	TYR	X	199	27.983	-60.258	36.976	1.00	16.66
ATOM	11346	CD2	TYR	X	199	25.773	-59.665	36.396	1.00	17.81
ATOM	11347	CE1	TYR	X	199	27.958	-61.281	36.044	1.00	19.59
ATOM	11348	CE2	TYR	X	199	25.742	-60.682	35.467	1.00	21.09
ATOM	11349	CZ	TYR	X	199	26.832	-61.490	35.301	1.00	19.00
ATOM	11350	OH	TYR	X	199	26.782	-62.545	34.428	1.00	19.43
ATOM	11351	N	ILE	X	200	28.377	-57.163	40.851	1.00	31.65
ATOM	11352	CA	ILE	X	200	28.497	-55.962	41.667	1.00	29.64
ATOM	11353	C	ILE	X	200	29.611	-55.104	41.117	1.00	27.35
ATOM	11354	O	ILE	X	200	30.679	-55.603	40.765	1.00	26.68
ATOM	11355	CB	ILE	X	200	28.852	-56.261	43.140	1.00	32.00
ATOM	11356	CG1	ILE	X	200	28.589	-57.729	43.480	1.00	35.15
ATOM	11357	CG2	ILE	X	200	28.106	-55.320	44.037	1.00	32.24
ATOM	11358	CD1	ILE	X	200	27.163	-58.056	43.817	1.00	39.67
ATOM	11359	N	CYS	X	201	29.368	-53.807	41.054	1.00	22.53
ATOM	11360	CA	CYS	X	201	30.370	-52.910	40.568	1.00	17.71
ATOM	11361	C	CYS	X	201	30.975	-52.271	41.789	1.00	19.53
ATOM	11362	O	CYS	X	201	30.291	-52.094	42.771	1.00	18.85
ATOM	11363	CB	CYS	X	201	29.729	-51.926	39.641	1.00	11.72
ATOM	11364	SG	CYS	X	201	28.696	-50.625	40.354	1.00	17.46
ATOM	11365	N	ASN	X	202	32.264	-51.950	41.749	1.00	23.35
ATOM	11366	CA	ASN	X	202	32.938	-51.403	42.916	1.00	24.11
ATOM	11367	C	ASN	X	202	33.522	-50.044	42.641	1.00	26.66
ATOM	11368	O	ASN	X	202	34.664	-49.951	42.229	1.00	32.62
ATOM	11369	CB	ASN	X	202	34.041	-52.363	43.342	1.00	22.89
ATOM	11370	CG	ASN	X	202	33.714	-53.824	43.003	1.00	29.84
ATOM	11371	OD1	ASN	X	202	34.373	-54.466	42.173	1.00	31.26
ATOM	11372	ND2	ASN	X	202	32.688	-54.354	43.650	1.00	31.64
ATOM	11373	N	VAL	X	203	32.745	-48.989	42.850	1.00	26.69
ATOM	11374	CA	VAL	X	203	33.246	-47.651	42.612	1.00	26.66
ATOM	11375	C	VAL	X	203	34.105	-47.220	43.762	1.00	29.44
ATOM	11376	O	VAL	X	203	33.715	-47.375	44.893	1.00	26.54
ATOM	11377	CB	VAL	X	203	32.122	-46.619	42.471	1.00	25.60
ATOM	11378	CG1	VAL	X	203	32.543	-45.322	43.126	1.00	23.62
ATOM	11379	CG2	VAL	X	203	31.841	-46.341	40.999	1.00	25.20
ATOM	11380	N	ASN	X	204	35.276	-46.673	43.480	1.00	37.15
ATOM	11381	CA	ASN	X	204	36.144	-46.210	44.546	1.00	43.77
ATOM	11382	C	ASN	X	204	36.663	-44.828	44.196	1.00	43.47
ATOM	11383	O	ASN	X	204	37.359	-44.657	43.198	1.00	46.58
ATOM	11384	CB	ASN	X	204	37.308	-47.174	44.750	1.00	51.86
ATOM	11385	CG	ASN	X	204	38.480	-46.513	45.448	1.00	61.90
ATOM	11386	OD1	ASN	X	204	39.468	-46.118	44.810	1.00	69.46
ATOM	11387	ND2	ASN	X	204	38.371	-46.369	46.765	1.00	62.47
ATOM	11388	N	HIS	X	205	36.290	-43.840	45.004	1.00	43.31
ATOM	11389	CA	HIS	X	205	36.715	-42.457	44.802	1.00	42.06
ATOM	11390	C	HIS	X	205	37.663	-41.974	45.892	1.00	42.61
ATOM	11391	O	HIS	X	205	37.306	-41.124	46.692	1.00	37.16
ATOM	11392	CB	HIS	X	205	35.511	-41.533	44.751	1.00	39.01
ATOM	11393	CG	HIS	X	205	35.835	-40.139	44.327	1.00	42.81
ATOM	11394	ND1	HIS	X	205	36.916	-39.841	43.530	1.00	49.90
ATOM	11395	CD2	HIS	X	205	35.218	-38.960	44.573	1.00	46.84
ATOM	11396	CE1	HIS	X	205	36.949	-38.535	43.302	1.00	49.78
ATOM	11397	NE2	HIS	X	205	35.928	-37.981	43.927	1.00	42.03
ATOM	11398	N	LYS	X	206	38.890	-42.487	45.869	1.00	45.40

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ATOM	11399	CA	LYS	X	206	39.900	-42.146	46.853	1.00	44.69
ATOM	11400	C	LYS	X	206	39.925	-40.658	47.212	1.00	44.78
ATOM	11401	O	LYS	X	206	39.957	-40.312	48.384	1.00	38.85
ATOM	11402	CB	LYS	X	206	41.264	-42.580	46.337	1.00	51.36
ATOM	11403	CG	LYS	X	206	41.401	-44.070	46.055	1.00	57.46
ATOM	11404	CD	LYS	X	206	42.841	-44.549	46.296	1.00	63.72
ATOM	11405	CE	LYS	X	206	43.041	-45.988	45.817	1.00	67.39
ATOM	11406	NZ	LYS	X	206	42.708	-46.194	44.367	1.00	73.59
ATOM	11407	N	PRO	X	207	39.946	-39.755	46.208	1.00	48.28
ATOM	11408	CA	PRO	X	207	39.967	-38.311	46.500	1.00	51.13
ATOM	11409	C	PRO	X	207	38.904	-37.840	47.490	1.00	51.77
ATOM	11410	O	PRO	X	207	38.754	-36.649	47.748	1.00	51.10
ATOM	11411	CB	PRO	X	207	39.798	-37.659	45.128	1.00	50.72
ATOM	11412	CG	PRO	X	207	40.418	-38.649	44.185	1.00	53.24
ATOM	11413	CD	PRO	X	207	40.028	-40.009	44.754	1.00	51.54
ATOM	11414	N	SER	X	208	38.155	-38.786	48.026	1.00	53.29
ATOM	11415	CA	SER	X	208	37.112	-38.467	48.986	1.00	56.05
ATOM	11416	C	SER	X	208	36.903	-39.664	49.891	1.00	59.12
ATOM	11417	O	SER	X	208	35.920	-39.756	50.621	1.00	57.89
ATOM	11418	CB	SER	X	208	35.792	-38.141	48.265	1.00	55.50
ATOM	11419	OG	SER	X	208	35.400	-39.166	47.362	1.00	53.76
ATOM	11420	N	ASN	X	209	37.819	-40.616	49.803	1.00	62.43
ATOM	11421	CA	ASN	X	209	37.734	-41.802	50.629	1.00	62.58
ATOM	11422	C	ASN	X	209	36.537	-42.637	50.223	1.00	59.07
ATOM	11423	O	ASN	X	209	36.404	-43.768	50.660	1.00	62.32
ATOM	11424	CB	ASN	X	209	37.652	-41.408	52.105	1.00	66.37
ATOM	11425	CG	ASN	X	209	36.953	-42.446	52.950	1.00	73.45
ATOM	11426	OD1	ASN	X	209	37.402	-43.589	53.070	1.00	75.63
ATOM	11427	ND2	ASN	X	209	35.839	-42.049	53.541	1.00	80.07
ATOM	11428	N	THR	X	210	35.718	-42.097	49.329	1.00	55.72
ATOM	11429	CA	THR	X	210	34.512	-42.767	48.845	1.00	54.21
ATOM	11430	C	THR	X	210	34.748	-44.161	48.254	1.00	52.13
ATOM	11431	O	THR	X	210	35.772	-44.428	47.625	1.00	52.27
ATOM	11432	CB	THR	X	210	33.808	-41.919	47.763	1.00	56.65
ATOM	11433	OG1	THR	X	210	33.227	-40.753	48.359	1.00	52.68
ATOM	11434	CG2	THR	X	210	32.740	-42.734	47.064	1.00	52.96
ATOM	11435	N	LYS	X	211	33.771	-45.034	48.462	1.00	49.78
ATOM	11436	CA	LYS	X	211	33.797	-46.408	47.980	1.00	51.63
ATOM	11437	C	LYS	X	211	32.396	-46.993	48.091	1.00	47.02
ATOM	11438	O	LYS	X	211	31.786	-46.932	49.141	1.00	45.32
ATOM	11439	CB	LYS	X	211	34.779	-47.248	48.802	1.00	57.83
ATOM	11440	CG	LYS	X	211	34.293	-48.658	49.104	1.00	65.12
ATOM	11441	CD	LYS	X	211	34.824	-49.708	48.129	1.00	71.59
ATOM	11442	CE	LYS	X	211	34.545	-51.113	48.665	1.00	76.02
ATOM	11443	NZ	LYS	X	211	34.988	-52.205	47.738	1.00	81.29
ATOM	11444	N	VAL	X	212	31.903	-47.566	46.999	1.00	44.06
ATOM	11445	CA	VAL	X	212	30.561	-48.135	46.929	1.00	37.70
ATOM	11446	C	VAL	X	212	30.560	-49.442	46.152	1.00	37.54
ATOM	11447	O	VAL	X	212	31.361	-49.651	45.252	1.00	39.46
ATOM	11448	CB	VAL	X	212	29.610	-47.165	46.204	1.00	32.28
ATOM	11449	CG1	VAL	X	212	28.285	-47.774	46.009	1.00	30.43
ATOM	11450	CG2	VAL	X	212	29.485	-45.900	46.979	1.00	33.83
ATOM	11451	N	ASP	X	213	29.646	-50.327	46.497	1.00	37.62
ATOM	11452	CA	ASP	X	213	29.548	-51.606	45.816	1.00	36.99
ATOM	11453	C	ASP	X	213	28.109	-51.839	45.406	1.00	32.24
ATOM	11454	O	ASP	X	213	27.382	-52.461	46.144	1.00	32.64
ATOM	11455	CB	ASP	X	213	30.009	-52.720	46.748	1.00	39.00
ATOM	11456	CG	ASP	X	213	31.486	-52.636	47.074	1.00	43.13
ATOM	11457	OD1	ASP	X	213	32.290	-52.375	46.156	1.00	50.95
ATOM	11458	OD2	ASP	X	213	31.856	-52.836	48.249	1.00	41.68

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ATOM	11459	N	LYS	X	214	27.728	-51.359	44.223	1.00	29.45
ATOM	11460	CA	LYS	X	214	26.374	-51.464	43.697	1.00	24.21
ATOM	11461	C	LYS	X	214	26.159	-52.850	43.124	1.00	27.81
ATOM	11462	O	LYS	X	214	26.859	-53.257	42.220	1.00	31.55
ATOM	11463	CB	LYS	X	214	26.162	-50.422	42.599	0.00	26.90
ATOM	11464	CG	LYS	X	214	24.784	-49.792	42.620	0.00	25.11
ATOM	11465	CD	LYS	X	214	23.777	-50.651	41.876	0.00	24.01
ATOM	11466	CE	LYS	X	214	22.697	-51.175	42.810	0.00	22.95
ATOM	11467	NZ	LYS	X	214	21.928	-50.069	43.444	0.00	21.90
ATOM	11468	N	LYS	X	215	25.208	-53.594	43.675	1.00	30.93
ATOM	11469	CA	LYS	X	215	24.884	-54.931	43.184	1.00	27.12
ATOM	11470	C	LYS	X	215	23.915	-54.647	42.044	1.00	28.52
ATOM	11471	O	LYS	X	215	22.790	-54.211	42.275	1.00	29.76
ATOM	11472	CB	LYS	X	215	24.196	-55.748	44.278	0.00	26.01
ATOM	11473	CG	LYS	X	215	23.676	-57.094	43.813	0.00	22.62
ATOM	11474	CD	LYS	X	215	23.518	-58.057	44.977	0.00	19.97
ATOM	11475	CE	LYS	X	215	22.121	-57.977	45.571	0.00	18.12
ATOM	11476	NZ	LYS	X	215	22.038	-58.660	46.893	0.00	16.43
ATOM	11477	N	VAL	X	216	24.359	-54.811	40.809	1.00	27.66
ATOM	11478	CA	VAL	X	216	23.464	-54.549	39.704	1.00	29.26
ATOM	11479	C	VAL	X	216	22.562	-55.749	39.573	1.00	34.08
ATOM	11480	O	VAL	X	216	23.016	-56.874	39.430	1.00	35.42
ATOM	11481	CB	VAL	X	216	24.212	-54.341	38.390	1.00	24.48
ATOM	11482	CG1	VAL	X	216	23.281	-53.742	37.355	1.00	24.51
ATOM	11483	CG2	VAL	X	216	25.341	-53.393	38.608	1.00	26.66
ATOM	11484	N	GLU	X	217	21.263	-55.513	39.645	1.00	37.86
ATOM	11485	CA	GLU	X	217	20.321	-56.604	39.523	1.00	37.77
ATOM	11486	C	GLU	X	217	19.380	-56.217	38.406	1.00	36.52
ATOM	11487	O	GLU	X	217	19.134	-55.004	38.169	1.00	35.93
ATOM	11488	CB	GLU	X	217	19.545	-56.793	40.828	1.00	42.75
ATOM	11489	CG	GLU	X	217	20.439	-56.887	42.035	1.00	48.84
ATOM	11490	CD	GLU	X	217	19.677	-57.023	43.329	1.00	52.96
ATOM	11491	OE1	GLU	X	217	19.553	-56.001	44.042	1.00	54.70
ATOM	11492	OE2	GLU	X	217	19.215	-58.151	43.632	1.00	57.05
ATOM	11493	N	PRO	X	218	18.851	-57.235	37.698	1.00	30.72
ATOM	11494	CA	PRO	X	218	17.930	-57.046	36.585	1.00	31.25
ATOM	11495	C	PRO	X	218	16.588	-56.543	36.984	1.00	33.19
ATOM	11496	O	PRO	X	218	15.661	-57.310	37.041	1.00	36.33
ATOM	11497	CB	PRO	X	218	17.830	-58.423	35.960	1.00	26.73
ATOM	11498	CG	PRO	X	218	18.119	-59.319	37.047	1.00	24.05
ATOM	11499	CD	PRO	X	218	19.135	-58.660	37.901	1.00	26.89
ATOM	11500	N	LYS	X	219	16.484	-55.253	37.269	1.00	37.89
ATOM	11501	CA	LYS	X	219	15.203	-54.664	37.612	1.00	39.02
ATOM	11502	C	LYS	X	219	14.505	-54.543	36.249	1.00	45.12
ATOM	11503	O	LYS	X	219	14.147	-55.622	35.689	1.00	45.98
ATOM	11504	CB	LYS	X	219	15.397	-53.280	38.240	0.00	35.98
ATOM	11505	CG	LYS	X	219	15.046	-53.217	39.719	0.00	31.17
ATOM	11506	CD	LYS	X	219	14.239	-51.971	40.046	0.00	27.26
ATOM	11507	CE	LYS	X	219	15.128	-50.856	40.571	0.00	24.68
ATOM	11508	NZ	LYS	X	219	15.625	-49.975	39.478	0.00	22.55
ATOM	11509	OT	LYS	X	219	14.357	-53.387	35.753	1.00	49.00
ATOM	11510	N	ASP	Y	1	51.487	-16.529	13.497	1.00	21.38
ATOM	11511	CA	ASP	Y	1	51.997	-17.865	13.894	1.00	18.08
ATOM	11512	C	ASP	Y	1	51.837	-18.792	12.726	1.00	17.38
ATOM	11513	O	ASP	Y	1	50.915	-18.636	11.951	1.00	23.46
ATOM	11514	CB	ASP	Y	1	51.203	-18.394	15.076	1.00	19.29
ATOM	11515	CG	ASP	Y	1	51.517	-17.651	16.358	1.00	22.83
ATOM	11516	OD1	ASP	Y	1	52.172	-16.565	16.286	1.00	21.68
ATOM	11517	OD2	ASP	Y	1	51.103	-18.165	17.433	1.00	24.42
ATOM	11518	N	ILE	Y	2	52.743	-19.744	12.579	1.00	16.42

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ATOM	11519	CA	ILE	Y	2	52.656	-20.686	11.464	1.00	13.68
ATOM	11520	C	ILE	Y	2	51.644	-21.717	11.857	1.00	11.18
ATOM	11521	O	ILE	Y	2	51.600	-22.080	13.018	1.00	14.24
ATOM	11522	CB	ILE	Y	2	54.002	-21.435	11.250	1.00	15.42
ATOM	11523	CG1	ILE	Y	2	55.163	-20.434	11.282	1.00	7.60
ATOM	11524	CG2	ILE	Y	2	53.927	-22.305	9.979	1.00	15.42
ATOM	11525	CD1	ILE	Y	2	56.252	-20.745	10.384	1.00	2.00
ATOM	11526	N	VAL	Y	3	50.872	-22.226	10.907	1.00	6.40
ATOM	11527	CA	VAL	Y	3	49.881	-23.245	11.219	1.00	7.90
ATOM	11528	C	VAL	Y	3	50.137	-24.568	10.502	1.00	10.87
ATOM	11529	O	VAL	Y	3	50.156	-24.635	9.279	1.00	18.98
ATOM	11530	CB	VAL	Y	3	48.471	-22.779	10.884	1.00	2.00
ATOM	11531	CG1	VAL	Y	3	47.512	-23.718	11.439	1.00	2.00
ATOM	11532	CG2	VAL	Y	3	48.209	-21.463	11.501	1.00	5.73
ATOM	11533	N	LEU	Y	4	50.300	-25.643	11.256	1.00	11.35
ATOM	11534	CA	LEU	Y	4	50.562	-26.932	10.615	1.00	12.12
ATOM	11535	C	LEU	Y	4	49.308	-27.760	10.535	1.00	8.63
ATOM	11536	O	LEU	Y	4	48.610	-27.901	11.506	1.00	15.50
ATOM	11537	CB	LEU	Y	4	51.620	-27.708	11.381	1.00	10.66
ATOM	11538	CG	LEU	Y	4	52.869	-26.895	11.614	1.00	6.96
ATOM	11539	CD1	LEU	Y	4	53.830	-27.759	12.384	1.00	2.21
ATOM	11540	CD2	LEU	Y	4	53.387	-26.382	10.247	1.00	6.08
ATOM	11541	N	THR	Y	5	49.029	-28.335	9.389	1.00	6.14
ATOM	11542	CA	THR	Y	5	47.822	-29.119	9.247	1.00	3.35
ATOM	11543	C	THR	Y	5	48.241	-30.526	8.912	1.00	3.46
ATOM	11544	O	THR	Y	5	48.853	-30.751	7.869	1.00	5.07
ATOM	11545	CB	THR	Y	5	46.987	-28.595	8.086	1.00	2.00
ATOM	11546	OG1	THR	Y	5	46.377	-27.348	8.433	1.00	2.00
ATOM	11547	CG2	THR	Y	5	45.978	-29.585	7.710	1.00	2.00
ATOM	11548	N	GLN	Y	6	47.906	-31.487	9.758	1.00	3.22
ATOM	11549	CA	GLN	Y	6	48.320	-32.848	9.447	1.00	4.78
ATOM	11550	C	GLN	Y	6	47.238	-33.528	8.633	1.00	2.00
ATOM	11551	O	GLN	Y	6	46.279	-32.921	8.256	1.00	2.00
ATOM	11552	CB	GLN	Y	6	48.674	-33.651	10.726	1.00	2.00
ATOM	11553	CG	GLN	Y	6	49.605	-32.928	11.704	1.00	2.00
ATOM	11554	CD	GLN	Y	6	50.105	-33.849	12.779	1.00	2.00
ATOM	11555	OE1	GLN	Y	6	50.640	-33.422	13.817	1.00	2.00
ATOM	11556	NE2	GLN	Y	6	49.916	-35.146	12.548	1.00	2.00
ATOM	11557	N	SER	Y	7	47.441	-34.781	8.302	1.00	2.92
ATOM	11558	CA	SER	Y	7	46.464	-35.487	7.533	1.00	2.00
ATOM	11559	C	SER	Y	7	47.052	-36.832	7.166	1.00	5.75
ATOM	11560	O	SER	Y	7	48.242	-36.921	6.896	1.00	7.90
ATOM	11561	CB	SER	Y	7	46.183	-34.743	6.275	1.00	2.00
ATOM	11562	OG	SER	Y	7	46.037	-35.743	5.315	1.00	2.00
ATOM	11563	N	PRO	Y	8	46.242	-37.907	7.203	1.00	8.26
ATOM	11564	CA	PRO	Y	8	44.835	-37.890	7.571	1.00	4.07
ATOM	11565	C	PRO	Y	8	44.846	-37.627	9.065	1.00	6.87
ATOM	11566	O	PRO	Y	8	45.920	-37.699	9.676	1.00	6.95
ATOM	11567	CB	PRO	Y	8	44.416	-39.314	7.272	1.00	5.76
ATOM	11568	CG	PRO	Y	8	45.614	-40.096	7.625	1.00	2.00
ATOM	11569	CD	PRO	Y	8	46.683	-39.297	6.981	1.00	7.52
ATOM	11570	N	ALA	Y	9	43.681	-37.336	9.652	1.00	7.32
ATOM	11571	CA	ALA	Y	9	43.608	-37.111	11.093	1.00	4.54
ATOM	11572	C	ALA	Y	9	43.688	-38.506	11.705	1.00	6.40
ATOM	11573	O	ALA	Y	9	44.269	-38.729	12.780	1.00	6.07
ATOM	11574	CB	ALA	Y	9	42.336	-36.477	11.439	1.00	5.54
ATOM	11575	N	THR	Y	10	43.094	-39.469	11.020	1.00	2.00
ATOM	11576	CA	THR	Y	10	43.194	-40.823	11.525	1.00	2.82
ATOM	11577	C	THR	Y	10	43.725	-41.675	10.419	1.00	7.34
ATOM	11578	O	THR	Y	10	43.178	-41.655	9.320	1.00	11.97

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ATOM	11579	CB	THR	Y	10	41.875	-41.462	11.799	1.00	2.34
ATOM	11580	OG1	THR	Y	10	41.160	-40.710	12.781	1.00	2.27
ATOM	11581	CG2	THR	Y	10	42.095	-42.947	12.230	1.00	2.89
ATOM	11582	N	LEU	Y	11	44.744	-42.469	10.705	1.00	2.00
ATOM	11583	CA	LEU	Y	11	45.283	-43.339	9.691	1.00	2.00
ATOM	11584	C	LEU	Y	11	45.154	-44.660	10.352	1.00	2.00
ATOM	11585	O	LEU	Y	11	45.719	-44.859	11.422	1.00	2.00
ATOM	11586	CB	LEU	Y	11	46.744	-42.998	9.401	1.00	3.46
ATOM	11587	CG	LEU	Y	11	47.582	-43.648	8.296	1.00	2.00
ATOM	11588	CD1	LEU	Y	11	47.609	-45.153	8.419	1.00	3.97
ATOM	11589	CD2	LEU	Y	11	47.018	-43.284	7.004	1.00	2.00
ATOM	11590	N	SER	Y	12	44.355	-45.532	9.732	1.00	3.85
ATOM	11591	CA	SER	Y	12	44.099	-46.872	10.255	1.00	5.01
ATOM	11592	C	SER	Y	12	44.855	-47.825	9.371	1.00	3.89
ATOM	11593	O	SER	Y	12	44.536	-47.985	8.206	1.00	5.45
ATOM	11594	CB	SER	Y	12	42.597	-47.180	10.224	1.00	13.55
ATOM	11595	OG	SER	Y	12	41.803	-46.123	10.767	1.00	19.89
ATOM	11596	N	VAL	Y	13	45.847	-48.469	9.963	1.00	3.75
ATOM	11597	CA	VAL	Y	13	46.757	-49.353	9.279	1.00	2.00
ATOM	11598	C	VAL	Y	13	46.847	-50.577	10.133	1.00	3.70
ATOM	11599	O	VAL	Y	13	46.562	-50.533	11.327	1.00	2.24
ATOM	11600	CB	VAL	Y	13	48.133	-48.664	9.234	1.00	2.00
ATOM	11601	CG1	VAL	Y	13	48.904	-48.969	10.477	1.00	6.53
ATOM	11602	CG2	VAL	Y	13	48.907	-49.082	8.047	1.00	8.37
ATOM	11603	N	SER	Y	14	47.291	-51.667	9.554	1.00	8.44
ATOM	11604	CA	SER	Y	14	47.404	-52.894	10.324	1.00	12.05
ATOM	11605	C	SER	Y	14	48.883	-53.075	10.591	1.00	13.71
ATOM	11606	O	SER	Y	14	49.721	-52.432	9.957	1.00	14.53
ATOM	11607	CB	SER	Y	14	46.905	-54.076	9.513	1.00	11.89
ATOM	11608	OG	SER	Y	14	47.360	-53.963	8.170	1.00	20.94
ATOM	11609	N	PRO	Y	15	49.235	-53.921	11.561	1.00	12.21
ATOM	11610	CA	PRO	Y	15	50.657	-54.127	11.824	1.00	10.98
ATOM	11611	C	PRO	Y	15	51.097	-54.755	10.517	1.00	15.08
ATOM	11612	O	PRO	Y	15	50.287	-55.431	9.860	1.00	18.30
ATOM	11613	CB	PRO	Y	15	50.658	-55.144	12.937	1.00	8.01
ATOM	11614	CG	PRO	Y	15	49.371	-55.018	13.550	1.00	7.29
ATOM	11615	CD	PRO	Y	15	48.410	-54.729	12.458	1.00	10.23
ATOM	11616	N	GLY	Y	16	52.347	-54.561	10.125	1.00	13.68
ATOM	11617	CA	GLY	Y	16	52.762	-55.115	8.849	1.00	14.48
ATOM	11618	C	GLY	Y	16	52.353	-54.170	7.718	1.00	14.16
ATOM	11619	O	GLY	Y	16	52.735	-54.353	6.563	1.00	20.29
ATOM	11620	N	GLU	Y	17	51.543	-53.165	8.012	1.00	11.91
ATOM	11621	CA	GLU	Y	17	51.171	-52.224	6.964	1.00	16.56
ATOM	11622	C	GLU	Y	17	52.096	-51.012	7.080	1.00	19.83
ATOM	11623	O	GLU	Y	17	52.573	-50.672	8.173	1.00	16.85
ATOM	11624	CB	GLU	Y	17	49.709	-51.803	7.118	1.00	20.81
ATOM	11625	CG	GLU	Y	17	49.035	-51.315	5.825	1.00	28.92
ATOM	11626	CD	GLU	Y	17	47.524	-50.966	5.961	1.00	36.14
ATOM	11627	OE1	GLU	Y	17	46.930	-51.139	7.064	1.00	32.14
ATOM	11628	OE2	GLU	Y	17	46.941	-50.507	4.936	1.00	33.72
ATOM	11629	N	ARG	Y	18	52.407	-50.393	5.947	1.00	20.85
ATOM	11630	CA	ARG	Y	18	53.262	-49.227	5.987	1.00	18.39
ATOM	11631	C	ARG	Y	18	52.341	-48.044	6.077	1.00	18.32
ATOM	11632	O	ARG	Y	18	51.285	-47.990	5.435	1.00	18.68
ATOM	11633	CB	ARG	Y	18	54.125	-49.138	4.739	1.00	21.84
ATOM	11634	CG	ARG	Y	18	54.512	-47.718	4.292	1.00	24.95
ATOM	11635	CD	ARG	Y	18	54.878	-47.715	2.812	1.00	28.54
ATOM	11636	NE	ARG	Y	18	56.101	-46.966	2.568	1.00	37.97
ATOM	11637	CZ	ARG	Y	18	56.390	-46.407	1.396	1.00	44.47
ATOM	11638	NH1	ARG	Y	18	55.521	-46.543	0.397	1.00	45.52



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ATOM	11639	NH2	ARG	Y	18	57.519	-45.710	1.222	1.00	40.41
ATOM	11640	N	ALA	Y	19	52.754	-47.096	6.890	1.00	14.28
ATOM	11641	CA	ALA	Y	19	51.972	-45.924	7.120	1.00	13.52
ATOM	11642	C	ALA	Y	19	52.771	-44.640	6.985	1.00	15.91
ATOM	11643	O	ALA	Y	19	53.877	-44.522	7.520	1.00	19.09
ATOM	11644	CB	ALA	Y	19	51.393	-46.016	8.501	1.00	11.17
ATOM	11645	N	THR	Y	20	52.198	-43.651	6.308	1.00	13.14
ATOM	11646	CA	THR	Y	20	52.881	-42.385	6.156	1.00	10.05
ATOM	11647	C	THR	Y	20	51.887	-41.214	6.365	1.00	13.03
ATOM	11648	O	THR	Y	20	50.873	-41.079	5.694	1.00	13.76
ATOM	11649	CB	THR	Y	20	53.562	-42.366	4.788	1.00	4.75
ATOM	11650	OG1	THR	Y	20	52.934	-41.403	3.955	1.00	11.72
ATOM	11651	CG2	THR	Y	20	53.414	-43.732	4.113	1.00	2.00
ATOM	11652	N	ILE	Y	21	52.185	-40.397	7.354	1.00	12.60
ATOM	11653	CA	ILE	Y	21	51.387	-39.238	7.701	1.00	11.56
ATOM	11654	C	ILE	Y	21	51.993	-38.039	6.985	1.00	14.11
ATOM	11655	O	ILE	Y	21	53.128	-38.066	6.576	1.00	22.92
ATOM	11656	CB	ILE	Y	21	51.560	-38.924	9.148	1.00	10.72
ATOM	11657	CG1	ILE	Y	21	51.077	-40.075	9.981	1.00	9.78
ATOM	11658	CG2	ILE	Y	21	50.960	-37.574	9.471	1.00	16.98
ATOM	11659	CD1	ILE	Y	21	51.849	-40.111	11.280	1.00	15.38
ATOM	11660	N	SER	Y	22	51.287	-36.942	6.916	1.00	8.69
ATOM	11661	CA	SER	Y	22	51.851	-35.828	6.237	1.00	8.50
ATOM	11662	C	SER	Y	22	51.545	-34.574	7.042	1.00	13.49
ATOM	11663	O	SER	Y	22	50.495	-34.513	7.672	1.00	18.50
ATOM	11664	CB	SER	Y	22	51.196	-35.778	4.888	1.00	7.70
ATOM	11665	OG	SER	Y	22	50.052	-34.949	4.973	1.00	8.66
ATOM	11666	N	CYS	Y	23	52.438	-33.575	7.023	1.00	10.50
ATOM	11667	CA	CYS	Y	23	52.211	-32.363	7.789	1.00	5.01
ATOM	11668	C	CYS	Y	23	52.235	-31.210	6.874	1.00	9.15
ATOM	11669	O	CYS	Y	23	52.614	-31.366	5.733	1.00	8.89
ATOM	11670	CB	CYS	Y	23	53.251	-32.177	8.865	1.00	6.61
ATOM	11671	SG	CYS	Y	23	52.984	-30.678	9.815	1.00	3.41
ATOM	11672	N	ARG	Y	24	51.817	-30.047	7.359	1.00	15.44
ATOM	11673	CA	ARG	Y	24	51.722	-28.895	6.466	1.00	17.43
ATOM	11674	C	ARG	Y	24	51.834	-27.485	7.011	1.00	21.43
ATOM	11675	O	ARG	Y	24	50.963	-27.018	7.775	1.00	24.64
ATOM	11676	CB	ARG	Y	24	50.423	-28.997	5.794	1.00	14.94
ATOM	11677	CG	ARG	Y	24	50.552	-29.200	4.390	1.00	12.51
ATOM	11678	CD	ARG	Y	24	49.579	-28.234	3.789	1.00	19.96
ATOM	11679	NE	ARG	Y	24	50.187	-27.942	2.559	1.00	15.90
ATOM	11680	CZ	ARG	Y	24	49.980	-28.635	1.467	1.00	17.90
ATOM	11681	NH1	ARG	Y	24	49.140	-29.682	1.465	1.00	2.00
ATOM	11682	NH2	ARG	Y	24	50.737	-28.304	0.415	1.00	21.55
ATOM	11683	N	ALA	Y	25	52.850	-26.783	6.527	1.00	16.77
ATOM	11684	CA	ALA	Y	25	53.129	-25.470	7.030	1.00	12.16
ATOM	11685	C	ALA	Y	25	52.407	-24.391	6.291	1.00	6.59
ATOM	11686	O	ALA	Y	25	52.298	-24.413	5.074	1.00	2.00
ATOM	11687	CB	ALA	Y	25	54.649	-25.233	7.029	1.00	17.39
ATOM	11688	N	SER	Y	26	51.885	-23.451	7.059	1.00	3.10
ATOM	11689	CA	SER	Y	26	51.166	-22.372	6.461	1.00	7.41
ATOM	11690	C	SER	Y	26	52.131	-21.559	5.659	1.00	12.21
ATOM	11691	O	SER	Y	26	51.726	-20.607	4.994	1.00	18.59
ATOM	11692	CB	SER	Y	26	50.490	-21.486	7.526	1.00	9.43
ATOM	11693	OG	SER	Y	26	51.182	-21.422	8.765	1.00	10.89
ATOM	11694	N	GLN	Y	27	53.414	-21.903	5.778	1.00	14.04
ATOM	11695	CA	GLN	Y	27	54.489	-21.213	5.072	1.00	13.45
ATOM	11696	C	GLN	Y	27	55.698	-22.145	5.058	1.00	14.56
ATOM	11697	O	GLN	Y	27	55.748	-23.103	5.839	1.00	12.13
ATOM	11698	CB	GLN	Y	27	54.817	-19.907	5.789	1.00	10.76

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ATOM	11699	CG	GLN	Y	27	55.435	-20.107	7.138	1.00	20.05
ATOM	11700	CD	GLN	Y	27	55.897	-18.807	7.746	1.00	27.79
ATOM	11701	OE1	GLN	Y	27	55.095	-18.050	8.296	1.00	35.00
ATOM	11702	NE2	GLN	Y	27	57.193	-18.527	7.650	1.00	29.08
ATOM	11703	N	ARG	Y	28	56.646	-21.882	4.155	1.00	14.63
ATOM	11704	CA	ARG	Y	28	57.860	-22.690	4.053	1.00	12.08
ATOM	11705	C	ARG	Y	28	58.599	-22.598	5.380	1.00	11.78
ATOM	11706	O	ARG	Y	28	58.597	-21.543	6.033	1.00	14.08
ATOM	11707	CB	ARG	Y	28	58.783	-22.132	2.983	1.00	18.06
ATOM	11708	CG	ARG	Y	28	58.488	-22.527	1.543	1.00	28.55
ATOM	11709	CD	ARG	Y	28	59.550	-21.933	0.580	1.00	37.24
ATOM	11710	NE	ARG	Y	28	59.249	-22.235	-0.824	1.00	49.02
ATOM	11711	CZ	ARG	Y	28	59.753	-23.265	-1.520	1.00	49.20
ATOM	11712	NH1	ARG	Y	28	60.595	-24.131	-0.957	1.00	45.41
ATOM	11713	NH2	ARG	Y	28	59.393	-23.442	-2.790	1.00	45.18
ATOM	11714	N	VAL	Y	29	59.246	-23.680	5.785	1.00	4.85
ATOM	11715	CA	VAL	Y	29	59.973	-23.652	7.035	1.00	7.37
ATOM	11716	C	VAL	Y	29	61.257	-24.447	6.819	1.00	13.50
ATOM	11717	O	VAL	Y	29	61.938	-24.916	7.772	1.00	15.34
ATOM	11718	CB	VAL	Y	29	59.165	-24.285	8.190	1.00	4.98
ATOM	11719	CG1	VAL	Y	29	58.013	-23.396	8.557	1.00	3.33
ATOM	11720	CG2	VAL	Y	29	58.718	-25.718	7.814	1.00	2.00
ATOM	11721	N	SER	Y	30	61.603	-24.593	5.548	1.00	13.94
ATOM	11722	CA	SER	Y	30	62.814	-25.319	5.209	1.00	13.53
ATOM	11723	C	SER	Y	30	63.637	-24.300	4.454	1.00	11.29
ATOM	11724	O	SER	Y	30	63.111	-23.716	3.509	1.00	14.68
ATOM	11725	CB	SER	Y	30	62.471	-26.487	4.305	1.00	10.79
ATOM	11726	OG	SER	Y	30	63.183	-26.370	3.099	1.00	18.73
ATOM	11727	N	SER	Y	31	64.878	-24.031	4.871	1.00	7.43
ATOM	11728	CA	SER	Y	31	65.671	-23.061	4.105	1.00	11.47
ATOM	11729	C	SER	Y	31	66.744	-23.787	3.255	1.00	17.72
ATOM	11730	O	SER	Y	31	66.496	-24.891	2.740	1.00	20.30
ATOM	11731	CB	SER	Y	31	66.308	-21.976	4.982	1.00	2.00
ATOM	11732	OG	SER	Y	31	67.308	-22.544	5.781	1.00	13.69
ATOM	11733	N	SER	Y	32	67.933	-23.201	3.105	1.00	21.16
ATOM	11734	CA	SER	Y	32	68.943	-23.810	2.234	1.00	15.27
ATOM	11735	C	SER	Y	32	69.657	-25.033	2.708	1.00	15.07
ATOM	11736	O	SER	Y	32	70.294	-25.699	1.900	1.00	17.27
ATOM	11737	CB	SER	Y	32	69.985	-22.785	1.777	1.00	9.40
ATOM	11738	OG	SER	Y	32	70.804	-22.412	2.850	1.00	2.00
ATOM	11739	N	THR	Y	33	69.574	-25.370	3.983	1.00	15.86
ATOM	11740	CA	THR	Y	33	70.279	-26.582	4.392	1.00	23.12
ATOM	11741	C	THR	Y	33	69.452	-27.518	5.243	1.00	28.38
ATOM	11742	O	THR	Y	33	69.640	-28.748	5.232	1.00	27.24
ATOM	11743	CB	THR	Y	33	71.517	-26.288	5.188	1.00	22.48
ATOM	11744	OG1	THR	Y	33	71.983	-24.954	4.927	1.00	27.87
ATOM	11745	CG2	THR	Y	33	72.540	-27.339	4.866	1.00	23.48
ATOM	11746	N	TYR	Y	34	68.556	-26.914	6.019	1.00	30.06
ATOM	11747	CA	TYR	Y	34	67.690	-27.681	6.880	1.00	25.40
ATOM	11748	C	TYR	Y	34	66.213	-27.268	6.710	1.00	24.06
ATOM	11749	O	TYR	Y	34	65.867	-26.181	6.172	1.00	14.63
ATOM	11750	CB	TYR	Y	34	68.131	-27.511	8.334	1.00	28.29
ATOM	11751	CG	TYR	Y	34	69.576	-27.877	8.595	1.00	32.35
ATOM	11752	CD1	TYR	Y	34	70.582	-27.431	7.752	1.00	39.16
ATOM	11753	CD2	TYR	Y	34	69.948	-28.603	9.721	1.00	34.83
ATOM	11754	CE1	TYR	Y	34	71.923	-27.685	8.005	1.00	43.18
ATOM	11755	CE2	TYR	Y	34	71.289	-28.864	9.998	1.00	40.32
ATOM	11756	CZ	TYR	Y	34	72.277	-28.400	9.128	1.00	45.76
ATOM	11757	OH	TYR	Y	34	73.615	-28.666	9.346	1.00	51.08
ATOM	11758	N	SER	Y	35	65.354	-28.183	7.162	1.00	22.65

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ATOM	11759	CA	SER	Y	35	63.915	-27.997	7.156	1.00	19.37
ATOM	11760	C	SER	Y	35	63.655	-28.056	8.649	1.00	17.47
ATOM	11761	O	SER	Y	35	63.976	-29.081	9.281	1.00	18.24
ATOM	11762	CB	SER	Y	35	63.244	-29.174	6.461	1.00	22.46
ATOM	11763	OG	SER	Y	35	63.710	-29.288	5.125	1.00	27.18
ATOM	11764	N	TYR	Y	36	63.121	-26.983	9.230	1.00	13.79
ATOM	11765	CA	TYR	Y	36	62.880	-27.001	10.682	1.00	16.59
ATOM	11766	C	TYR	Y	36	61.578	-27.678	11.159	1.00	14.82
ATOM	11767	O	TYR	Y	36	60.778	-27.083	11.853	1.00	17.67
ATOM	11768	CB	TYR	Y	36	63.018	-25.579	11.227	1.00	12.74
ATOM	11769	CG	TYR	Y	36	64.443	-25.151	11.109	1.00	9.09
ATOM	11770	CD1	TYR	Y	36	65.260	-25.123	12.223	1.00	10.42
ATOM	11771	CD2	TYR	Y	36	65.006	-24.868	9.865	1.00	8.61
ATOM	11772	CE1	TYR	Y	36	66.600	-24.831	12.118	1.00	13.95
ATOM	11773	CE2	TYR	Y	36	66.371	-24.568	9.740	1.00	2.39
ATOM	11774	CZ	TYR	Y	36	67.151	-24.553	10.881	1.00	8.05
ATOM	11775	OH	TYR	Y	36	68.475	-24.234	10.855	1.00	9.80
ATOM	11776	N	MET	Y	37	61.430	-28.953	10.811	1.00	12.13
ATOM	11777	CA	MET	Y	37	60.268	-29.768	11.119	1.00	9.33
ATOM	11778	C	MET	Y	37	60.685	-30.936	11.936	1.00	9.30
ATOM	11779	O	MET	Y	37	61.718	-31.479	11.663	1.00	10.83
ATOM	11780	CB	MET	Y	37	59.695	-30.324	9.841	1.00	10.55
ATOM	11781	CG	MET	Y	37	58.403	-29.627	9.429	1.00	20.32
ATOM	11782	SD	MET	Y	37	57.009	-29.507	10.664	1.00	15.93
ATOM	11783	CE	MET	Y	37	55.885	-28.664	9.589	1.00	6.68
ATOM	11784	N	HIS	Y	38	59.878	-31.337	12.921	1.00	13.16
ATOM	11785	CA	HIS	Y	38	60.164	-32.509	13.785	1.00	9.02
ATOM	11786	C	HIS	Y	38	58.902	-33.271	14.055	1.00	6.41
ATOM	11787	O	HIS	Y	38	57.822	-32.706	14.038	1.00	6.74
ATOM	11788	CB	HIS	Y	38	60.772	-32.085	15.092	1.00	2.00
ATOM	11789	CG	HIS	Y	38	61.632	-30.890	14.939	1.00	4.48
ATOM	11790	ND1	HIS	Y	38	62.949	-30.965	14.567	1.00	7.39
ATOM	11791	CD2	HIS	Y	38	61.333	-29.572	15.002	1.00	11.28
ATOM	11792	CE1	HIS	Y	38	63.435	-29.747	14.417	1.00	10.15
ATOM	11793	NE2	HIS	Y	38	62.468	-28.881	14.679	1.00	11.14
ATOM	11794	N	TRP	Y	39	59.034	-34.564	14.267	1.00	3.22
ATOM	11795	CA	TRP	Y	39	57.870	-35.374	14.532	1.00	8.64
ATOM	11796	C	TRP	Y	39	57.906	-36.083	15.868	1.00	9.04
ATOM	11797	O	TRP	Y	39	58.948	-36.564	16.315	1.00	13.14
ATOM	11798	CB	TRP	Y	39	57.711	-36.423	13.459	1.00	12.63
ATOM	11799	CG	TRP	Y	39	57.514	-35.877	12.098	1.00	7.92
ATOM	11800	CD1	TRP	Y	39	58.474	-35.604	11.197	1.00	7.17
ATOM	11801	CD2	TRP	Y	39	56.285	-35.804	11.408	1.00	7.49
ATOM	11802	NE1	TRP	Y	39	57.930	-35.384	9.961	1.00	6.44
ATOM	11803	CE2	TRP	Y	39	56.580	-35.496	10.061	1.00	7.08
ATOM	11804	CE3	TRP	Y	39	54.958	-35.976	11.792	1.00	8.00
ATOM	11805	CZ2	TRP	Y	39	55.596	-35.353	9.089	1.00	11.45
ATOM	11806	CZ3	TRP	Y	39	53.978	-35.845	10.833	1.00	15.88
ATOM	11807	CH2	TRP	Y	39	54.305	-35.533	9.482	1.00	16.64
ATOM	11808	N	TYR	Y	40	56.745	-36.167	16.498	1.00	9.35
ATOM	11809	CA	TYR	Y	40	56.657	-36.866	17.763	1.00	6.31
ATOM	11810	C	TYR	Y	40	55.522	-37.875	17.716	1.00	3.48
ATOM	11811	O	TYR	Y	40	54.560	-37.755	16.936	1.00	2.00
ATOM	11812	CB	TYR	Y	40	56.419	-35.897	18.913	1.00	3.19
ATOM	11813	CG	TYR	Y	40	57.337	-34.722	18.910	1.00	3.16
ATOM	11814	CD1	TYR	Y	40	58.086	-34.410	20.035	1.00	10.54
ATOM	11815	CD2	TYR	Y	40	57.463	-33.920	17.800	1.00	2.00
ATOM	11816	CE1	TYR	Y	40	58.955	-33.301	20.067	1.00	13.06
ATOM	11817	CE2	TYR	Y	40	58.320	-32.814	17.804	1.00	9.67
ATOM	11818	CZ	TYR	Y	40	59.068	-32.496	18.941	1.00	13.28

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ATOM	11819	OH	TYR	Y	40	59.884	-31.359	18.925	1.00	11.69
ATOM	11820	N	GLN	Y	41	55.672	-38.923	18.494	1.00	2.00
ATOM	11821	CA	GLN	Y	41	54.583	-39.877	18.598	1.00	7.68
ATOM	11822	C	GLN	Y	41	54.159	-39.705	20.064	1.00	8.66
ATOM	11823	O	GLN	Y	41	54.974	-39.434	20.947	1.00	12.79
ATOM	11824	CB	GLN	Y	41	55.040	-41.310	18.377	1.00	8.59
ATOM	11825	CG	GLN	Y	41	55.480	-41.951	19.661	1.00	9.41
ATOM	11826	CD	GLN	Y	41	55.508	-43.445	19.588	1.00	15.84
ATOM	11827	OE1	GLN	Y	41	55.036	-44.049	18.609	1.00	16.99
ATOM	11828	NE2	GLN	Y	41	56.061	-44.075	20.634	1.00	19.92
ATOM	11829	N	GLN	Y	42	52.889	-39.835	20.356	1.00	8.83
ATOM	11830	CA	GLN	Y	42	52.508	-39.691	21.743	1.00	13.87
ATOM	11831	C	GLN	Y	42	51.473	-40.750	22.047	1.00	15.77
ATOM	11832	O	GLN	Y	42	50.517	-40.950	21.297	1.00	13.15
ATOM	11833	CB	GLN	Y	42	51.944	-38.300	22.052	1.00	11.09
ATOM	11834	CG	GLN	Y	42	51.061	-38.317	23.286	1.00	6.07
ATOM	11835	CD	GLN	Y	42	50.687	-36.940	23.811	1.00	9.72
ATOM	11836	OE1	GLN	Y	42	49.951	-36.157	23.148	1.00	5.67
ATOM	11837	NE2	GLN	Y	42	51.166	-36.637	25.023	1.00	3.22
ATOM	11838	N	LYS	Y	43	51.714	-41.469	23.131	1.00	20.39
ATOM	11839	CA	LYS	Y	43	50.814	-42.514	23.564	1.00	20.69
ATOM	11840	C	LYS	Y	43	49.849	-41.923	24.567	1.00	22.63
ATOM	11841	O	LYS	Y	43	50.096	-40.836	25.103	1.00	21.01
ATOM	11842	CB	LYS	Y	43	51.612	-43.627	24.231	1.00	21.21
ATOM	11843	CG	LYS	Y	43	52.694	-44.254	23.340	1.00	19.72
ATOM	11844	CD	LYS	Y	43	52.128	-45.275	22.352	1.00	18.64
ATOM	11845	CE	LYS	Y	43	53.013	-46.523	22.292	1.00	23.20
ATOM	11846	NZ	LYS	Y	43	54.365	-46.189	21.746	1.00	29.61
ATOM	11847	N	PRO	Y	44	48.728	-42.622	24.820	1.00	26.83
ATOM	11848	CA	PRO	Y	44	47.753	-42.105	25.790	1.00	25.39
ATOM	11849	C	PRO	Y	44	48.419	-42.102	27.157	1.00	22.69
ATOM	11850	O	PRO	Y	44	49.175	-43.035	27.500	1.00	18.90
ATOM	11851	CB	PRO	Y	44	46.600	-43.100	25.727	1.00	25.08
ATOM	11852	CG	PRO	Y	44	46.824	-43.873	24.406	1.00	30.30
ATOM	11853	CD	PRO	Y	44	48.302	-43.904	24.225	1.00	27.32
ATOM	11854	N	GLY	Y	45	48.150	-41.044	27.915	1.00	17.85
ATOM	11855	CA	GLY	Y	45	48.727	-40.930	29.231	1.00	20.32
ATOM	11856	C	GLY	Y	45	50.149	-40.423	29.287	1.00	25.05
ATOM	11857	O	GLY	Y	45	50.533	-39.825	30.293	1.00	27.51
ATOM	11858	N	GLN	Y	46	50.920	-40.634	28.213	1.00	28.12
ATOM	11859	CA	GLN	Y	46	52.327	-40.215	28.156	1.00	24.91
ATOM	11860	C	GLN	Y	46	52.587	-38.944	27.334	1.00	22.24
ATOM	11861	O	GLN	Y	46	51.750	-38.510	26.515	1.00	22.20
ATOM	11862	CB	GLN	Y	46	53.190	-41.359	27.611	1.00	30.10
ATOM	11863	CG	GLN	Y	46	52.559	-42.729	27.746	1.00	39.64
ATOM	11864	CD	GLN	Y	46	53.586	-43.819	27.901	1.00	43.88
ATOM	11865	OE1	GLN	Y	46	54.218	-44.226	26.930	1.00	47.26
ATOM	11866	NE2	GLN	Y	46	53.753	-44.312	29.130	1.00	51.27
ATOM	11867	N	PRO	Y	47	53.773	-38.340	27.530	1.00	16.19
ATOM	11868	CA	PRO	Y	47	54.119	-37.122	26.804	1.00	13.72
ATOM	11869	C	PRO	Y	47	54.696	-37.522	25.497	1.00	14.83
ATOM	11870	O	PRO	Y	47	55.066	-38.653	25.322	1.00	24.28
ATOM	11871	CB	PRO	Y	47	55.146	-36.450	27.690	1.00	12.32
ATOM	11872	CG	PRO	Y	47	55.696	-37.556	28.559	1.00	8.26
ATOM	11873	CD	PRO	Y	47	54.873	-38.791	28.391	1.00	10.83
ATOM	11874	N	PRO	Y	48	54.809	-36.598	24.560	1.00	12.88
ATOM	11875	CA	PRO	Y	48	55.359	-36.946	23.265	1.00	11.95
ATOM	11876	C	PRO	Y	48	56.755	-37.517	23.399	1.00	11.39
ATOM	11877	O	PRO	Y	48	57.442	-37.215	24.365	1.00	16.03
ATOM	11878	CB	PRO	Y	48	55.369	-35.612	22.533	1.00	11.67

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ATOM	11879	CG	PRO	Y	48	54.355	-34.831	23.180	1.00	12.06
ATOM	11880	CD	PRO	Y	48	54.487	-35.173	24.624	1.00	16.34
ATOM	11881	N	LYS	Y	49	57.170	-38.312	22.413	1.00	6.51
ATOM	11882	CA	LYS	Y	49	58.507	-38.892	22.357	1.00	7.61
ATOM	11883	C	LYS	Y	49	59.031	-38.414	21.012	1.00	10.21
ATOM	11884	O	LYS	Y	49	58.327	-38.582	20.003	1.00	14.86
ATOM	11885	CB	LYS	Y	49	58.448	-40.404	22.306	1.00	13.01
ATOM	11886	CG	LYS	Y	49	59.794	-41.090	22.560	1.00	21.49
ATOM	11887	CD	LYS	Y	49	60.617	-41.255	21.286	1.00	28.54
ATOM	11888	CE	LYS	Y	49	62.130	-41.041	21.533	1.00	33.35
ATOM	11889	NZ	LYS	Y	49	62.592	-39.600	21.521	1.00	27.83
ATOM	11890	N	LEU	Y	50	60.236	-37.831	20.969	1.00	10.62
ATOM	11891	CA	LEU	Y	50	60.818	-37.329	19.690	1.00	8.58
ATOM	11892	C	LEU	Y	50	61.238	-38.453	18.785	1.00	3.30
ATOM	11893	O	LEU	Y	50	61.961	-39.325	19.206	1.00	3.32
ATOM	11894	CB	LEU	Y	50	62.065	-36.480	19.929	1.00	10.87
ATOM	11895	CG	LEU	Y	50	62.983	-36.285	18.722	1.00	9.58
ATOM	11896	CD1	LEU	Y	50	62.200	-36.092	17.408	1.00	2.04
ATOM	11897	CD2	LEU	Y	50	63.872	-35.079	19.067	1.00	10.06
ATOM	11898	N	LEU	Y	51	60.789	-38.447	17.547	1.00	2.79
ATOM	11899	CA	LEU	Y	51	61.193	-39.513	16.645	1.00	6.74
ATOM	11900	C	LEU	Y	51	62.121	-39.022	15.570	1.00	8.30
ATOM	11901	O	LEU	Y	51	63.165	-39.614	15.349	1.00	11.06
ATOM	11902	CB	LEU	Y	51	59.993	-40.150	15.984	1.00	4.77
ATOM	11903	CG	LEU	Y	51	59.287	-41.154	16.854	1.00	7.31
ATOM	11904	CD1	LEU	Y	51	57.820	-40.822	16.816	1.00	15.25
ATOM	11905	CD2	LEU	Y	51	59.505	-42.540	16.304	1.00	12.46
ATOM	11906	N	ILE	Y	52	61.733	-37.938	14.911	1.00	5.88
ATOM	11907	CA	ILE	Y	52	62.522	-37.394	13.850	1.00	2.00
ATOM	11908	C	ILE	Y	52	62.676	-35.925	14.048	1.00	7.62
ATOM	11909	O	ILE	Y	52	61.709	-35.260	14.377	1.00	11.74
ATOM	11910	CB	ILE	Y	52	61.811	-37.670	12.568	1.00	2.00
ATOM	11911	CG1	ILE	Y	52	62.028	-39.128	12.242	1.00	11.07
ATOM	11912	CG2	ILE	Y	52	62.357	-36.899	11.447	1.00	4.35
ATOM	11913	CD1	ILE	Y	52	60.976	-39.716	11.351	1.00	17.62
ATOM	11914	N	LYS	Y	53	63.898	-35.420	13.842	1.00	11.36
ATOM	11915	CA	LYS	Y	53	64.206	-33.991	13.952	1.00	9.55
ATOM	11916	C	LYS	Y	53	64.732	-33.457	12.619	1.00	7.42
ATOM	11917	O	LYS	Y	53	65.375	-34.161	11.844	1.00	6.24
ATOM	11918	CB	LYS	Y	53	65.252	-33.734	15.024	1.00	12.93
ATOM	11919	CG	LYS	Y	53	66.583	-34.350	14.673	1.00	20.33
ATOM	11920	CD	LYS	Y	53	67.180	-35.083	15.859	1.00	28.06
ATOM	11921	CE	LYS	Y	53	67.843	-34.125	16.853	1.00	26.17
ATOM	11922	NZ	LYS	Y	53	69.084	-34.737	17.388	1.00	22.53
ATOM	11923	N	TYR	Y	54	64.437	-32.195	12.363	1.00	7.72
ATOM	11924	CA	TYR	Y	54	64.837	-31.536	11.140	1.00	4.79
ATOM	11925	C	TYR	Y	54	64.383	-32.357	9.941	1.00	8.26
ATOM	11926	O	TYR	Y	54	65.163	-32.824	9.153	1.00	9.40
ATOM	11927	CB	TYR	Y	54	66.331	-31.320	11.112	1.00	2.00
ATOM	11928	CG	TYR	Y	54	66.819	-30.564	12.277	1.00	2.00
ATOM	11929	CD1	TYR	Y	54	67.049	-31.196	13.460	1.00	2.00
ATOM	11930	CD2	TYR	Y	54	67.025	-29.199	12.212	1.00	2.00
ATOM	11931	CE1	TYR	Y	54	67.482	-30.481	14.563	1.00	5.23
ATOM	11932	CE2	TYR	Y	54	67.462	-28.472	13.320	1.00	2.00
ATOM	11933	CZ	TYR	Y	54	67.691	-29.128	14.477	1.00	2.00
ATOM	11934	OH	TYR	Y	54	68.208	-28.488	15.556	1.00	2.00
ATOM	11935	N	ALA	Y	55	63.092	-32.605	9.882	1.00	11.30
ATOM	11936	CA	ALA	Y	55	62.474	-33.271	8.760	1.00	9.72
ATOM	11937	C	ALA	Y	55	62.880	-34.639	8.368	1.00	9.41
ATOM	11938	O	ALA	Y	55	62.030	-35.361	7.821	1.00	14.23

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ATOM	11939	CB	ALA	Y	55	62.564	-32.404	7.540	1.00	11.31
ATOM	11940	N	SER	Y	56	64.129	-35.025	8.615	1.00	6.57
ATOM	11941	CA	SER	Y	56	64.523	-36.356	8.173	1.00	5.39
ATOM	11942	C	SER	Y	56	65.558	-37.168	8.926	1.00	2.00
ATOM	11943	O	SER	Y	56	65.905	-38.249	8.487	1.00	2.00
ATOM	11944	CB	SER	Y	56	64.964	-36.274	6.744	1.00	2.00
ATOM	11945	OG	SER	Y	56	66.352	-36.134	6.770	1.00	16.12
ATOM	11946	N	ASN	Y	57	66.043	-36.659	10.048	1.00	2.00
ATOM	11947	CA	ASN	Y	57	67.010	-37.411	10.823	1.00	5.60
ATOM	11948	C	ASN	Y	57	66.403	-38.054	12.050	1.00	5.53
ATOM	11949	O	ASN	Y	57	65.861	-37.365	12.921	1.00	7.49
ATOM	11950	CB	ASN	Y	57	68.174	-36.531	11.316	1.00	14.86
ATOM	11951	CG	ASN	Y	57	68.383	-35.318	10.472	1.00	22.63
ATOM	11952	OD1	ASN	Y	57	68.805	-35.416	9.319	1.00	28.69
ATOM	11953	ND2	ASN	Y	57	68.080	-34.154	11.031	1.00	28.83
ATOM	11954	N	LEU	Y	58	66.593	-39.361	12.173	1.00	4.23
ATOM	11955	CA	LEU	Y	58	66.071	-40.117	13.315	1.00	4.59
ATOM	11956	C	LEU	Y	58	66.702	-39.670	14.603	1.00	3.66
ATOM	11957	O	LEU	Y	58	67.888	-39.546	14.660	1.00	5.80
ATOM	11958	CB	LEU	Y	58	66.385	-41.576	13.161	1.00	5.16
ATOM	11959	CG	LEU	Y	58	65.227	-42.380	12.625	1.00	6.67
ATOM	11960	CD1	LEU	Y	58	65.563	-42.916	11.236	1.00	7.09
ATOM	11961	CD2	LEU	Y	58	64.954	-43.495	13.618	1.00	3.80
ATOM	11962	N	GLU	Y	59	65.913	-39.434	15.641	1.00	8.32
ATOM	11963	CA	GLU	Y	59	66.452	-38.988	16.908	1.00	4.75
ATOM	11964	C	GLU	Y	59	67.182	-40.163	17.380	1.00	6.08
ATOM	11965	O	GLU	Y	59	67.037	-41.222	16.802	1.00	4.92
ATOM	11966	CB	GLU	Y	59	65.338	-38.680	17.866	1.00	3.34
ATOM	11967	CG	GLU	Y	59	65.771	-38.679	19.286	1.00	5.88
ATOM	11968	CD	GLU	Y	59	66.629	-37.514	19.531	1.00	8.81
ATOM	11969	OE1	GLU	Y	59	66.670	-36.989	20.657	1.00	17.24
ATOM	11970	OE2	GLU	Y	59	67.275	-37.107	18.561	1.00	10.10
ATOM	11971	N	SER	Y	60	68.001	-39.991	18.395	1.00	11.02
ATOM	11972	CA	SER	Y	60	68.738	-41.136	18.863	1.00	22.66
ATOM	11973	C	SER	Y	60	67.844	-42.141	19.541	1.00	21.54
ATOM	11974	O	SER	Y	60	67.122	-41.778	20.450	1.00	30.43
ATOM	11975	CB	SER	Y	60	69.880	-40.727	19.803	1.00	24.65
ATOM	11976	OG	SER	Y	60	71.022	-41.522	19.504	1.00	42.78
ATOM	11977	N	GLY	Y	61	67.887	-43.400	19.112	1.00	18.47
ATOM	11978	CA	GLY	Y	61	67.056	-44.400	19.761	1.00	17.96
ATOM	11979	C	GLY	Y	61	65.829	-44.800	18.967	1.00	15.97
ATOM	11980	O	GLY	Y	61	65.294	-45.914	19.071	1.00	17.49
ATOM	11981	N	VAL	Y	62	65.381	-43.893	18.133	1.00	9.36
ATOM	11982	CA	VAL	Y	62	64.206	-44.203	17.365	1.00	6.19
ATOM	11983	C	VAL	Y	62	64.613	-45.335	16.452	1.00	4.95
ATOM	11984	O	VAL	Y	62	65.708	-45.336	15.949	1.00	8.84
ATOM	11985	CB	VAL	Y	62	63.784	-43.017	16.501	1.00	4.37
ATOM	11986	CG1	VAL	Y	62	62.669	-43.400	15.654	1.00	9.61
ATOM	11987	CG2	VAL	Y	62	63.388	-41.865	17.344	1.00	8.66
ATOM	11988	N	PRO	Y	63	63.748	-46.328	16.260	1.00	2.15
ATOM	11989	CA	PRO	Y	63	63.946	-47.495	15.413	1.00	2.00
ATOM	11990	C	PRO	Y	63	63.914	-47.100	13.962	1.00	2.87
ATOM	11991	O	PRO	Y	63	63.214	-46.173	13.557	1.00	3.62
ATOM	11992	CB	PRO	Y	63	62.793	-48.392	15.772	1.00	2.00
ATOM	11993	CG	PRO	Y	63	62.309	-47.857	17.044	1.00	4.36
ATOM	11994	CD	PRO	Y	63	62.472	-46.414	16.955	1.00	4.42
ATOM	11995	N	ALA	Y	64	64.669	-47.835	13.164	1.00	6.96
ATOM	11996	CA	ALA	Y	64	64.789	-47.502	11.771	1.00	8.72
ATOM	11997	C	ALA	Y	64	63.551	-47.477	10.926	1.00	13.09
ATOM	11998	O	ALA	Y	64	63.605	-46.881	9.866	1.00	17.75

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ATOM	11999	CB	ALA	Y	64	65.793	-48.387	11.131	1.00	5.64
ATOM	12000	N	ARG	Y	65	62.447	-48.113	11.327	1.00	15.19
ATOM	12001	CA	ARG	Y	65	61.280	-48.067	10.432	1.00	16.00
ATOM	12002	C	ARG	Y	65	60.900	-46.602	10.261	1.00	15.84
ATOM	12003	O	ARG	Y	65	60.504	-46.157	9.169	1.00	17.19
ATOM	12004	CB	ARG	Y	65	60.060	-48.834	10.977	1.00	21.00
ATOM	12005	CG	ARG	Y	65	60.144	-49.414	12.413	1.00	24.89
ATOM	12006	CD	ARG	Y	65	58.862	-50.249	12.752	1.00	15.55
ATOM	12007	NE	ARG	Y	65	58.345	-49.905	14.071	1.00	9.58
ATOM	12008	CZ	ARG	Y	65	58.965	-50.159	15.223	1.00	6.98
ATOM	12009	NH1	ARG	Y	65	60.191	-50.664	15.253	1.00	5.56
ATOM	12010	NH2	ARG	Y	65	58.379	-49.824	16.356	1.00	8.39
ATOM	12011	N	PHE	Y	66	61.031	-45.857	11.357	1.00	10.86
ATOM	12012	CA	PHE	Y	66	60.712	-44.435	11.364	1.00	10.89
ATOM	12013	C	PHE	Y	66	61.617	-43.680	10.450	1.00	7.44
ATOM	12014	O	PHE	Y	66	62.811	-43.888	10.466	1.00	10.37
ATOM	12015	CB	PHE	Y	66	60.829	-43.840	12.763	1.00	10.73
ATOM	12016	CG	PHE	Y	66	59.771	-44.307	13.694	1.00	4.81
ATOM	12017	CD1	PHE	Y	66	58.475	-43.832	13.562	1.00	2.06
ATOM	12018	CD2	PHE	Y	66	60.056	-45.312	14.616	1.00	2.00
ATOM	12019	CE1	PHE	Y	66	57.480	-44.354	14.309	1.00	7.22
ATOM	12020	CE2	PHE	Y	66	59.092	-45.844	15.363	1.00	4.91
ATOM	12021	CZ	PHE	Y	66	57.778	-45.377	15.220	1.00	12.00
ATOM	12022	N	SER	Y	67	61.025	-42.797	9.671	1.00	2.00
ATOM	12023	CA	SER	Y	67	61.749	-42.024	8.710	1.00	2.00
ATOM	12024	C	SER	Y	67	60.875	-40.854	8.359	1.00	6.92
ATOM	12025	O	SER	Y	67	59.663	-40.909	8.563	1.00	11.65
ATOM	12026	CB	SER	Y	67	61.937	-42.893	7.481	1.00	2.00
ATOM	12027	OG	SER	Y	67	61.099	-42.534	6.381	1.00	3.03
ATOM	12028	N	GLY	Y	68	61.470	-39.830	7.770	1.00	9.61
ATOM	12029	CA	GLY	Y	68	60.711	-38.660	7.381	1.00	14.53
ATOM	12030	C	GLY	Y	68	61.331	-37.853	6.252	1.00	16.90
ATOM	12031	O	GLY	Y	68	62.552	-37.792	6.118	1.00	22.32
ATOM	12032	N	SER	Y	69	60.497	-37.206	5.451	1.00	15.73
ATOM	12033	CA	SER	Y	69	61.002	-36.410	4.365	1.00	11.26
ATOM	12034	C	SER	Y	69	60.123	-35.190	4.175	1.00	14.34
ATOM	12035	O	SER	Y	69	59.161	-35.018	4.919	1.00	19.91
ATOM	12036	CB	SER	Y	69	60.971	-37.224	3.128	1.00	8.60
ATOM	12037	OG	SER	Y	69	60.061	-36.612	2.242	1.00	20.67
ATOM	12038	N	GLY	Y	70	60.461	-34.355	3.185	1.00	15.03
ATOM	12039	CA	GLY	Y	70	59.691	-33.158	2.898	1.00	11.51
ATOM	12040	C	GLY	Y	70	60.566	-31.940	2.861	1.00	9.10
ATOM	12041	O	GLY	Y	70	61.750	-32.049	3.049	1.00	14.62
ATOM	12042	N	SER	Y	71	59.976	-30.775	2.661	1.00	11.54
ATOM	12043	CA	SER	Y	71	60.724	-29.529	2.569	1.00	9.67
ATOM	12044	C	SER	Y	71	59.728	-28.397	2.315	1.00	13.47
ATOM	12045	O	SER	Y	71	58.623	-28.619	1.802	1.00	18.43
ATOM	12046	CB	SER	Y	71	61.699	-29.606	1.394	1.00	9.98
ATOM	12047	OG	SER	Y	71	61.033	-29.578	0.127	1.00	12.31
ATOM	12048	N	GLY	Y	72	60.115	-27.175	2.635	1.00	13.96
ATOM	12049	CA	GLY	Y	72	59.206	-26.069	2.401	1.00	15.20
ATOM	12050	C	GLY	Y	72	57.978	-26.129	3.274	1.00	14.57
ATOM	12051	O	GLY	Y	72	58.033	-25.789	4.449	1.00	19.32
ATOM	12052	N	THR	Y	73	56.865	-26.582	2.719	1.00	15.08
ATOM	12053	CA	THR	Y	73	55.654	-26.620	3.515	1.00	12.93
ATOM	12054	C	THR	Y	73	55.023	-27.962	3.696	1.00	12.63
ATOM	12055	O	THR	Y	73	54.019	-28.054	4.397	1.00	19.49
ATOM	12056	CB	THR	Y	73	54.568	-25.711	2.942	1.00	11.95
ATOM	12057	OG1	THR	Y	73	54.278	-26.117	1.594	1.00	6.32
ATOM	12058	CG2	THR	Y	73	55.012	-24.209	3.033	1.00	8.03

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ATOM	12059	N	ASP	Y	74	55.573	-28.991	3.073	1.00	10.16
ATOM	12060	CA	ASP	Y	74	55.009	-30.320	3.203	1.00	4.66
ATOM	12061	C	ASP	Y	74	56.025	-31.328	3.693	1.00	2.11
ATOM	12062	O	ASP	Y	74	57.135	-31.410	3.203	1.00	5.78
ATOM	12063	CB	ASP	Y	74	54.413	-30.770	1.870	1.00	5.11
ATOM	12064	CG	ASP	Y	74	53.146	-30.001	1.503	1.00	8.61
ATOM	12065	OD1	ASP	Y	74	52.072	-30.288	2.097	1.00	16.82
ATOM	12066	OD2	ASP	Y	74	53.210	-29.101	0.639	1.00	2.20
ATOM	12067	N	PHE	Y	75	55.632	-32.117	4.668	1.00	2.43
ATOM	12068	CA	PHE	Y	75	56.515	-33.111	5.219	1.00	4.28
ATOM	12069	C	PHE	Y	75	55.772	-34.402	5.498	1.00	7.85
ATOM	12070	O	PHE	Y	75	54.562	-34.417	5.661	1.00	11.67
ATOM	12071	CB	PHE	Y	75	57.137	-32.546	6.480	1.00	2.04
ATOM	12072	CG	PHE	Y	75	57.927	-31.308	6.223	1.00	4.79
ATOM	12073	CD1	PHE	Y	75	57.346	-30.059	6.308	1.00	11.88
ATOM	12074	CD2	PHE	Y	75	59.240	-31.389	5.814	1.00	6.89
ATOM	12075	CE1	PHE	Y	75	58.061	-28.903	5.980	1.00	6.74
ATOM	12076	CE2	PHE	Y	75	59.940	-30.258	5.499	1.00	4.23
ATOM	12077	CZ	PHE	Y	75	59.340	-29.009	5.582	1.00	5.91
ATOM	12078	N	THR	Y	76	56.499	-35.501	5.515	1.00	5.79
ATOM	12079	CA	THR	Y	76	55.893	-36.772	5.810	1.00	4.91
ATOM	12080	C	THR	Y	76	56.762	-37.458	6.822	1.00	7.83
ATOM	12081	O	THR	Y	76	57.902	-37.045	7.046	1.00	9.68
ATOM	12082	CB	THR	Y	76	55.843	-37.606	4.628	1.00	2.00
ATOM	12083	OG1	THR	Y	76	57.176	-37.697	4.110	1.00	5.64
ATOM	12084	CG2	THR	Y	76	54.859	-37.007	3.641	1.00	2.00
ATOM	12085	N	LEU	Y	77	56.171	-38.453	7.478	1.00	7.60
ATOM	12086	CA	LEU	Y	77	56.812	-39.263	8.501	1.00	6.14
ATOM	12087	C	LEU	Y	77	56.314	-40.649	8.177	1.00	9.94
ATOM	12088	O	LEU	Y	77	55.097	-40.827	8.030	1.00	13.97
ATOM	12089	CB	LEU	Y	77	56.309	-38.854	9.880	1.00	2.00
ATOM	12090	CG	LEU	Y	77	56.688	-39.718	11.094	1.00	2.00
ATOM	12091	CD1	LEU	Y	77	55.647	-40.675	11.362	1.00	2.00
ATOM	12092	CD2	LEU	Y	77	57.855	-40.549	10.845	1.00	10.29
ATOM	12093	N	THR	Y	78	57.191	-41.638	8.015	1.00	3.23
ATOM	12094	CA	THR	Y	78	56.627	-42.933	7.689	1.00	4.03
ATOM	12095	C	THR	Y	78	57.268	-44.135	8.287	1.00	3.29
ATOM	12096	O	THR	Y	78	58.460	-44.290	8.211	1.00	12.49
ATOM	12097	CB	THR	Y	78	56.493	-43.169	6.124	1.00	2.84
ATOM	12098	OG1	THR	Y	78	57.163	-44.374	5.758	1.00	2.00
ATOM	12099	CG2	THR	Y	78	57.049	-42.048	5.303	1.00	2.00
ATOM	12100	N	ILE	Y	79	56.463	-44.992	8.896	1.00	2.74
ATOM	12101	CA	ILE	Y	79	56.953	-46.220	9.498	1.00	3.80
ATOM	12102	C	ILE	Y	79	56.955	-47.212	8.369	1.00	6.87
ATOM	12103	O	ILE	Y	79	55.951	-47.303	7.670	1.00	6.32
ATOM	12104	CB	ILE	Y	79	55.990	-46.671	10.562	1.00	7.37
ATOM	12105	CG1	ILE	Y	79	55.585	-45.438	11.407	1.00	7.33
ATOM	12106	CG2	ILE	Y	79	56.596	-47.850	11.318	1.00	7.58
ATOM	12107	CD1	ILE	Y	79	54.763	-45.706	12.647	1.00	2.00
ATOM	12108	N	SER	Y	80	58.068	-47.934	8.164	1.00	12.32
ATOM	12109	CA	SER	Y	80	58.160	-48.881	7.039	1.00	11.94
ATOM	12110	C	SER	Y	80	57.242	-50.083	7.119	1.00	12.86
ATOM	12111	O	SER	Y	80	56.853	-50.647	6.096	1.00	19.38
ATOM	12112	CB	SER	Y	80	59.594	-49.359	6.826	1.00	10.48
ATOM	12113	OG	SER	Y	80	60.190	-49.757	8.039	1.00	15.27
ATOM	12114	N	SER	Y	81	56.911	-50.488	8.329	1.00	11.02
ATOM	12115	CA	SER	Y	81	55.981	-51.594	8.530	1.00	12.44
ATOM	12116	C	SER	Y	81	55.631	-51.526	10.015	1.00	16.89
ATOM	12117	O	SER	Y	81	56.476	-51.857	10.912	1.00	12.61
ATOM	12118	CB	SER	Y	81	56.608	-52.924	8.267	1.00	2.54



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ATOM	12119	OG	SER	Y	81	57.483	-53.154	9.363	1.00	19.08
ATOM	12120	N	VAL	Y	82	54.384	-51.077	10.234	1.00	16.68
ATOM	12121	CA	VAL	Y	82	53.794	-50.886	11.548	1.00	18.21
ATOM	12122	C	VAL	Y	82	53.958	-52.072	12.485	1.00	18.22
ATOM	12123	O	VAL	Y	82	53.926	-53.232	12.074	1.00	17.61
ATOM	12124	CB	VAL	Y	82	52.309	-50.510	11.414	1.00	18.64
ATOM	12125	CG1	VAL	Y	82	51.677	-50.407	12.757	1.00	19.68
ATOM	12126	CG2	VAL	Y	82	52.191	-49.178	10.721	1.00	15.28
ATOM	12127	N	GLU	Y	83	54.183	-51.753	13.753	1.00	16.79
ATOM	12128	CA	GLU	Y	83	54.359	-52.758	14.763	1.00	19.36
ATOM	12129	C	GLU	Y	83	53.424	-52.337	15.853	1.00	18.05
ATOM	12130	O	GLU	Y	83	53.174	-51.142	16.017	1.00	19.38
ATOM	12131	CB	GLU	Y	83	55.798	-52.733	15.253	1.00	28.43
ATOM	12132	CG	GLU	Y	83	56.834	-52.738	14.110	1.00	38.91
ATOM	12133	CD	GLU	Y	83	58.211	-53.312	14.500	1.00	45.52
ATOM	12134	OE1	GLU	Y	83	58.557	-53.404	15.708	1.00	47.06
ATOM	12135	OE2	GLU	Y	83	58.963	-53.674	13.568	1.00	50.53
ATOM	12136	N	PRO	Y	84	52.891	-53.301	16.624	1.00	17.93
ATOM	12137	CA	PRO	Y	84	51.964	-52.964	17.706	1.00	16.81
ATOM	12138	C	PRO	Y	84	52.320	-51.725	18.459	1.00	14.92
ATOM	12139	O	PRO	Y	84	51.496	-50.834	18.552	1.00	14.94
ATOM	12140	CB	PRO	Y	84	51.979	-54.196	18.596	1.00	13.45
ATOM	12141	CG	PRO	Y	84	52.107	-55.278	17.611	1.00	21.65
ATOM	12142	CD	PRO	Y	84	53.096	-54.754	16.554	1.00	19.32
ATOM	12143	N	GLU	Y	85	53.560	-51.627	18.929	1.00	18.02
ATOM	12144	CA	GLU	Y	85	53.932	-50.465	19.721	1.00	20.81
ATOM	12145	C	GLU	Y	85	53.708	-49.148	18.982	1.00	15.26
ATOM	12146	O	GLU	Y	85	53.381	-48.133	19.587	1.00	17.39
ATOM	12147	CB	GLU	Y	85	55.399	-50.567	20.259	1.00	27.70
ATOM	12148	CG	GLU	Y	85	56.527	-51.137	19.350	1.00	40.32
ATOM	12149	CD	GLU	Y	85	57.964	-50.829	19.886	1.00	49.15
ATOM	12150	OE1	GLU	Y	85	58.967	-51.173	19.203	1.00	51.48
ATOM	12151	OE2	GLU	Y	85	58.094	-50.241	20.991	1.00	53.18
ATOM	12152	N	ASP	Y	86	53.842	-49.176	17.672	1.00	7.00
ATOM	12153	CA	ASP	Y	86	53.703	-47.980	16.879	1.00	8.00
ATOM	12154	C	ASP	Y	86	52.383	-47.261	16.893	1.00	10.05
ATOM	12155	O	ASP	Y	86	52.297	-46.065	16.537	1.00	5.99
ATOM	12156	CB	ASP	Y	86	54.019	-48.304	15.446	1.00	14.77
ATOM	12157	CG	ASP	Y	86	55.432	-48.617	15.251	1.00	14.16
ATOM	12158	OD1	ASP	Y	86	56.199	-48.421	16.223	1.00	13.96
ATOM	12159	OD2	ASP	Y	86	55.738	-49.051	14.119	1.00	21.42
ATOM	12160	N	PHE	Y	87	51.337	-48.010	17.219	1.00	13.52
ATOM	12161	CA	PHE	Y	87	50.016	-47.409	17.265	1.00	12.11
ATOM	12162	C	PHE	Y	87	49.993	-46.325	18.308	1.00	9.09
ATOM	12163	O	PHE	Y	87	50.208	-46.554	19.496	1.00	6.68
ATOM	12164	CB	PHE	Y	87	48.964	-48.474	17.500	1.00	8.38
ATOM	12165	CG	PHE	Y	87	48.707	-49.287	16.296	1.00	7.28
ATOM	12166	CD1	PHE	Y	87	49.063	-50.630	16.287	1.00	2.00
ATOM	12167	CD2	PHE	Y	87	48.109	-48.701	15.152	1.00	2.58
ATOM	12168	CE1	PHE	Y	87	48.827	-51.408	15.156	1.00	7.23
ATOM	12169	CE2	PHE	Y	87	47.862	-49.447	14.010	1.00	7.38
ATOM	12170	CZ	PHE	Y	87	48.219	-50.823	13.995	1.00	7.87
ATOM	12171	N	ALA	Y	88	49.770	-45.116	17.839	1.00	4.34
ATOM	12172	CA	ALA	Y	88	49.758	-44.009	18.746	1.00	6.38
ATOM	12173	C	ALA	Y	88	49.305	-42.824	17.951	1.00	5.41
ATOM	12174	O	ALA	Y	88	48.707	-42.987	16.885	1.00	6.62
ATOM	12175	CB	ALA	Y	88	51.124	-43.795	19.326	1.00	4.30
ATOM	12176	N	THR	Y	89	49.539	-41.640	18.478	1.00	2.00
ATOM	12177	CA	THR	Y	89	49.123	-40.469	17.769	1.00	7.60
ATOM	12178	C	THR	Y	89	50.360	-39.624	17.517	1.00	8.09

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ATOM	12179	O	THR	Y	89	51.176	-39.437	18.424	1.00	8.26
ATOM	12180	CB	THR	Y	89	48.067	-39.738	18.601	1.00	12.61
ATOM	12181	OG1	THR	Y	89	46.772	-40.119	18.112	1.00	15.36
ATOM	12182	CG2	THR	Y	89	48.274	-38.171	18.559	1.00	11.70
ATOM	12183	N	TYR	Y	90	50.481	-39.105	16.296	1.00	5.80
ATOM	12184	CA	TYR	Y	90	51.652	-38.332	15.891	1.00	7.97
ATOM	12185	C	TYR	Y	90	51.510	-36.828	15.570	1.00	6.69
ATOM	12186	O	TYR	Y	90	50.612	-36.379	14.840	1.00	2.00
ATOM	12187	CB	TYR	Y	90	52.323	-39.031	14.684	1.00	11.34
ATOM	12188	CG	TYR	Y	90	52.783	-40.454	14.932	1.00	14.65
ATOM	12189	CD1	TYR	Y	90	51.870	-41.444	15.266	1.00	17.30
ATOM	12190	CD2	TYR	Y	90	54.137	-40.800	14.897	1.00	14.65
ATOM	12191	CE1	TYR	Y	90	52.284	-42.732	15.577	1.00	16.85
ATOM	12192	CE2	TYR	Y	90	54.564	-42.103	15.208	1.00	14.16
ATOM	12193	CZ	TYR	Y	90	53.611	-43.053	15.554	1.00	13.69
ATOM	12194	OH	TYR	Y	90	53.926	-44.323	15.936	1.00	14.52
ATOM	12195	N	TYR	Y	91	52.460	-36.056	16.083	1.00	5.78
ATOM	12196	CA	TYR	Y	91	52.471	-34.623	15.826	1.00	8.03
ATOM	12197	C	TYR	Y	91	53.728	-34.193	15.057	1.00	7.16
ATOM	12198	O	TYR	Y	91	54.828	-34.673	15.321	1.00	8.37
ATOM	12199	CB	TYR	Y	91	52.450	-33.844	17.147	1.00	12.04
ATOM	12200	CG	TYR	Y	91	51.264	-34.114	18.028	1.00	12.13
ATOM	12201	CD1	TYR	Y	91	50.024	-33.492	17.777	1.00	13.79
ATOM	12202	CD2	TYR	Y	91	51.351	-35.015	19.066	1.00	4.36
ATOM	12203	CE1	TYR	Y	91	48.899	-33.776	18.539	1.00	8.40
ATOM	12204	CE2	TYR	Y	91	50.237	-35.301	19.833	1.00	12.79
ATOM	12205	CZ	TYR	Y	91	49.016	-34.679	19.563	1.00	11.81
ATOM	12206	OH	TYR	Y	91	47.920	-34.991	20.334	1.00	24.65
ATOM	12207	N	CYS	Y	92	53.567	-33.287	14.114	1.00	2.34
ATOM	12208	CA	CYS	Y	92	54.705	-32.779	13.394	1.00	5.93
ATOM	12209	C	CYS	Y	92	54.791	-31.393	14.042	1.00	11.63
ATOM	12210	O	CYS	Y	92	53.766	-30.851	14.447	1.00	16.53
ATOM	12211	CB	CYS	Y	92	54.372	-32.657	11.899	1.00	2.00
ATOM	12212	SG	CYS	Y	92	53.113	-31.372	11.741	1.00	6.61
ATOM	12213	N	GLN	Y	93	55.988	-30.822	14.149	1.00	13.24
ATOM	12214	CA	GLN	Y	93	56.151	-29.491	14.733	1.00	9.95
ATOM	12215	C	GLN	Y	93	57.391	-28.798	14.229	1.00	10.01
ATOM	12216	O	GLN	Y	93	58.461	-29.379	14.157	1.00	12.19
ATOM	12217	CB	GLN	Y	93	56.238	-29.527	16.236	1.00	3.82
ATOM	12218	CG	GLN	Y	93	57.062	-28.383	16.772	1.00	3.80
ATOM	12219	CD	GLN	Y	93	58.357	-28.851	17.413	1.00	3.49
ATOM	12220	OE1	GLN	Y	93	58.959	-28.140	18.183	1.00	7.65
ATOM	12221	NE2	GLN	Y	93	58.798	-30.039	17.070	1.00	2.82
ATOM	12222	N	HIS	Y	94	57.238	-27.529	13.904	1.00	9.49
ATOM	12223	CA	HIS	Y	94	58.335	-26.747	13.395	1.00	7.90
ATOM	12224	C	HIS	Y	94	59.144	-26.086	14.501	1.00	6.92
ATOM	12225	O	HIS	Y	94	58.995	-26.420	15.693	1.00	2.00
ATOM	12226	CB	HIS	Y	94	57.809	-25.712	12.414	1.00	6.11
ATOM	12227	CG	HIS	Y	94	57.311	-24.483	13.074	1.00	9.16
ATOM	12228	ND1	HIS	Y	94	57.059	-23.321	12.388	1.00	14.01
ATOM	12229	CD2	HIS	Y	94	56.950	-24.248	14.359	1.00	15.33
ATOM	12230	CE1	HIS	Y	94	56.547	-22.423	13.217	1.00	18.08
ATOM	12231	NE2	HIS	Y	94	56.469	-22.967	14.421	1.00	16.84
ATOM	12232	N	SER	Y	95	60.033	-25.193	14.061	1.00	5.81
ATOM	12233	CA	SER	Y	95	60.948	-24.445	14.923	1.00	8.02
ATOM	12234	C	SER	Y	95	61.563	-23.369	14.071	1.00	4.33
ATOM	12235	O	SER	Y	95	62.698	-22.991	14.263	1.00	2.00
ATOM	12236	CB	SER	Y	95	62.081	-25.330	15.451	1.00	7.04
ATOM	12237	OG	SER	Y	95	62.903	-25.727	14.374	1.00	8.38
ATOM	12238	N	TRP	Y	96	60.766	-22.870	13.152	1.00	7.47

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ATOM	12239	CA	TRP	Y	96	61.185	-21.846	12.244	1.00	5.68
ATOM	12240	C	TRP	Y	96	61.183	-20.540	12.947	1.00	7.60
ATOM	12241	O	TRP	Y	96	61.962	-19.675	12.588	1.00	15.86
ATOM	12242	CB	TRP	Y	96	60.221	-21.740	11.109	1.00	10.17
ATOM	12243	CG	TRP	Y	96	60.647	-20.832	10.089	1.00	7.07
ATOM	12244	CD1	TRP	Y	96	60.207	-19.573	9.890	1.00	10.31
ATOM	12245	CD2	TRP	Y	96	61.554	-21.122	9.040	1.00	14.90
ATOM	12246	NE1	TRP	Y	96	60.771	-19.049	8.759	1.00	16.44
ATOM	12247	CE2	TRP	Y	96	61.616	-19.978	8.220	1.00	16.09
ATOM	12248	CE3	TRP	Y	96	62.327	-22.242	8.708	1.00	15.90
ATOM	12249	CZ2	TRP	Y	96	62.417	-19.917	7.087	1.00	12.96
ATOM	12250	CZ3	TRP	Y	96	63.118	-22.186	7.585	1.00	14.48
ATOM	12251	CH2	TRP	Y	96	63.158	-21.029	6.782	1.00	15.40
ATOM	12252	N	GLU	Y	97	60.295	-20.356	13.919	1.00	4.24
ATOM	12253	CA	GLU	Y	97	60.284	-19.093	14.662	1.00	5.82
ATOM	12254	C	GLU	Y	97	59.639	-19.238	15.989	1.00	2.83
ATOM	12255	O	GLU	Y	97	59.352	-20.346	16.388	1.00	11.93
ATOM	12256	CB	GLU	Y	97	59.597	-17.946	13.918	1.00	3.26
ATOM	12257	CG	GLU	Y	97	58.140	-17.951	13.909	1.00	12.73
ATOM	12258	CD	GLU	Y	97	57.603	-17.136	12.744	1.00	27.14
ATOM	12259	OE1	GLU	Y	97	58.417	-16.643	11.926	1.00	28.29
ATOM	12260	OE2	GLU	Y	97	56.363	-16.980	12.634	1.00	34.93
ATOM	12261	N	ILE	Y	98	59.501	-18.152	16.728	1.00	2.00
ATOM	12262	CA	ILE	Y	98	58.768	-18.224	17.985	1.00	5.91
ATOM	12263	C	ILE	Y	98	57.326	-17.808	17.606	1.00	8.48
ATOM	12264	O	ILE	Y	98	57.128	-16.819	16.883	1.00	9.28
ATOM	12265	CB	ILE	Y	98	59.269	-17.254	18.999	1.00	3.58
ATOM	12266	CG1	ILE	Y	98	60.574	-17.771	19.589	1.00	11.81
ATOM	12267	CG2	ILE	Y	98	58.263	-17.109	20.053	1.00	2.00
ATOM	12268	CD1	ILE	Y	98	60.856	-17.329	21.058	1.00	14.36
ATOM	12269	N	PRO	Y	99	56.300	-18.554	18.081	1.00	5.88
ATOM	12270	CA	PRO	Y	99	56.368	-19.729	18.929	1.00	3.29
ATOM	12271	C	PRO	Y	99	56.384	-21.039	18.120	1.00	2.52
ATOM	12272	O	PRO	Y	99	55.809	-21.151	17.045	1.00	3.23
ATOM	12273	CB	PRO	Y	99	55.093	-19.602	19.700	1.00	2.00
ATOM	12274	CG	PRO	Y	99	54.157	-19.202	18.639	1.00	2.00
ATOM	12275	CD	PRO	Y	99	54.895	-18.311	17.720	1.00	2.00
ATOM	12276	N	PRO	Y	100	57.062	-22.046	18.622	1.00	2.00
ATOM	12277	CA	PRO	Y	100	57.010	-23.259	17.811	1.00	2.00
ATOM	12278	C	PRO	Y	100	55.574	-23.673	17.927	1.00	2.00
ATOM	12279	O	PRO	Y	100	54.946	-23.413	18.925	1.00	2.02
ATOM	12280	CB	PRO	Y	100	57.863	-24.256	18.563	1.00	4.17
ATOM	12281	CG	PRO	Y	100	57.880	-23.733	19.973	1.00	5.37
ATOM	12282	CD	PRO	Y	100	57.812	-22.213	19.864	1.00	2.00
ATOM	12283	N	THR	Y	101	55.045	-24.344	16.934	1.00	2.92
ATOM	12284	CA	THR	Y	101	53.668	-24.773	17.011	1.00	2.72
ATOM	12285	C	THR	Y	101	53.508	-26.146	16.421	1.00	3.04
ATOM	12286	O	THR	Y	101	54.109	-26.452	15.377	1.00	2.00
ATOM	12287	CB	THR	Y	101	52.815	-23.865	16.229	1.00	2.78
ATOM	12288	OG1	THR	Y	101	53.266	-23.906	14.860	1.00	2.78
ATOM	12289	CG2	THR	Y	101	52.859	-22.446	16.862	1.00	2.00
ATOM	12290	N	PHE	Y	102	52.625	-26.923	17.061	1.00	6.42
ATOM	12291	CA	PHE	Y	102	52.348	-28.308	16.672	1.00	4.34
ATOM	12292	C	PHE	Y	102	51.180	-28.512	15.711	1.00	4.95
ATOM	12293	O	PHE	Y	102	50.303	-27.661	15.580	1.00	7.23
ATOM	12294	CB	PHE	Y	102	52.122	-29.174	17.900	1.00	2.02
ATOM	12295	CG	PHE	Y	102	53.301	-29.244	18.832	1.00	2.00
ATOM	12296	CD1	PHE	Y	102	53.508	-28.277	19.791	1.00	2.00
ATOM	12297	CD2	PHE	Y	102	54.115	-30.350	18.849	1.00	2.00
ATOM	12298	CE1	PHE	Y	102	54.499	-28.434	20.766	1.00	4.00

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ATOM	12299	CE2	PHE	Y	102	55.099	-30.490	19.821	1.00	2.00
ATOM	12300	CZ	PHE	Y	102	55.284	-29.538	20.776	1.00	2.00
ATOM	12301	N	GLY	Y	103	51.239	-29.620	14.973	1.00	7.36
ATOM	12302	CA	GLY	Y	103	50.194	-29.962	14.034	1.00	2.31
ATOM	12303	C	GLY	Y	103	49.010	-30.487	14.826	1.00	4.49
ATOM	12304	O	GLY	Y	103	49.101	-30.706	16.051	1.00	2.00
ATOM	12305	N	GLY	Y	104	47.900	-30.700	14.118	1.00	5.23
ATOM	12306	CA	GLY	Y	104	46.677	-31.195	14.733	1.00	9.99
ATOM	12307	C	GLY	Y	104	46.776	-32.565	15.367	1.00	6.64
ATOM	12308	O	GLY	Y	104	46.175	-32.852	16.392	1.00	11.56
ATOM	12309	N	GLY	Y	105	47.587	-33.407	14.781	1.00	4.36
ATOM	12310	CA	GLY	Y	105	47.726	-34.725	15.336	1.00	2.00
ATOM	12311	C	GLY	Y	105	47.111	-35.677	14.360	1.00	2.00
ATOM	12312	O	GLY	Y	105	46.280	-35.274	13.553	1.00	2.00
ATOM	12313	N	THR	Y	106	47.588	-36.908	14.378	1.00	2.00
ATOM	12314	CA	THR	Y	106	47.057	-37.933	13.518	1.00	3.37
ATOM	12315	C	THR	Y	106	47.049	-39.160	14.410	1.00	6.55
ATOM	12316	O	THR	Y	106	48.004	-39.475	15.122	1.00	12.02
ATOM	12317	CB	THR	Y	106	47.968	-38.181	12.240	1.00	2.00
ATOM	12318	OG1	THR	Y	106	47.602	-37.276	11.186	1.00	2.00
ATOM	12319	CG2	THR	Y	106	47.843	-39.628	11.724	1.00	2.00
ATOM	12320	N	LYS	Y	107	45.949	-39.858	14.422	1.00	5.31
ATOM	12321	CA	LYS	Y	107	45.956	-41.014	15.252	1.00	7.19
ATOM	12322	C	LYS	Y	107	46.314	-42.104	14.295	1.00	9.19
ATOM	12323	O	LYS	Y	107	45.887	-42.080	13.131	1.00	9.56
ATOM	12324	CB	LYS	Y	107	44.568	-41.226	15.850	1.00	11.26
ATOM	12325	CG	LYS	Y	107	44.290	-42.598	16.447	1.00	11.43
ATOM	12326	CD	LYS	Y	107	43.334	-42.475	17.628	1.00	12.18
ATOM	12327	CE	LYS	Y	107	42.104	-43.349	17.432	1.00	12.74
ATOM	12328	NZ	LYS	Y	107	41.741	-43.860	18.765	1.00	18.49
ATOM	12329	N	LEU	Y	108	47.145	-43.027	14.761	1.00	8.28
ATOM	12330	CA	LEU	Y	108	47.504	-44.155	13.942	1.00	8.04
ATOM	12331	C	LEU	Y	108	46.717	-45.307	14.515	1.00	9.31
ATOM	12332	O	LEU	Y	108	47.183	-46.074	15.367	1.00	8.82
ATOM	12333	CB	LEU	Y	108	48.998	-44.442	13.976	1.00	7.13
ATOM	12334	CG	LEU	Y	108	49.321	-45.518	12.934	1.00	4.05
ATOM	12335	CD1	LEU	Y	108	49.097	-45.036	11.529	1.00	2.00
ATOM	12336	CD2	LEU	Y	108	50.738	-45.969	13.155	1.00	13.92
ATOM	12337	N	GLU	Y	109	45.494	-45.386	14.027	1.00	9.03
ATOM	12338	CA	GLU	Y	109	44.527	-46.397	14.425	1.00	12.54
ATOM	12339	C	GLU	Y	109	44.791	-47.810	13.848	1.00	7.61
ATOM	12340	O	GLU	Y	109	45.477	-47.956	12.866	1.00	10.59
ATOM	12341	CB	GLU	Y	109	43.120	-45.881	14.027	1.00	15.51
ATOM	12342	CG	GLU	Y	109	41.939	-46.473	14.814	1.00	16.59
ATOM	12343	CD	GLU	Y	109	40.802	-46.935	13.898	1.00	18.32
ATOM	12344	OE1	GLU	Y	109	41.074	-47.430	12.790	1.00	15.58
ATOM	12345	OE2	GLU	Y	109	39.625	-46.807	14.272	1.00	22.04
ATOM	12346	N	ILE	Y	110	44.225	-48.843	14.456	1.00	3.66
ATOM	12347	CA	ILE	Y	110	44.397	-50.219	13.988	1.00	3.53
ATOM	12348	C	ILE	Y	110	43.327	-50.593	12.965	1.00	6.27
ATOM	12349	O	ILE	Y	110	42.174	-50.629	13.312	1.00	12.58
ATOM	12350	CB	ILE	Y	110	44.243	-51.195	15.157	1.00	2.81
ATOM	12351	CG1	ILE	Y	110	45.178	-50.778	16.300	1.00	3.23
ATOM	12352	CG2	ILE	Y	110	44.444	-52.618	14.678	1.00	2.00
ATOM	12353	CD1	ILE	Y	110	45.379	-51.826	17.368	1.00	2.45
ATOM	12354	N	LYS	Y	111	43.674	-50.892	11.719	1.00	10.68
ATOM	12355	CA	LYS	Y	111	42.645	-51.268	10.729	1.00	8.86
ATOM	12356	C	LYS	Y	111	42.102	-52.541	11.328	1.00	11.03
ATOM	12357	O	LYS	Y	111	42.792	-53.206	12.118	1.00	5.37
ATOM	12358	CB	LYS	Y	111	43.263	-51.591	9.347	1.00	13.62

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ATOM	12359	CG	LYS	Y	111	42.585	-50.970	8.075	1.00	17.63
ATOM	12360	CD	LYS	Y	111	43.338	-51.230	6.663	1.00	26.32
ATOM	12361	CE	LYS	Y	111	44.389	-50.060	6.165	1.00	28.62
ATOM	12362	NZ	LYS	Y	111	44.882	-49.856	4.662	1.00	2.00
ATOM	12363	N	ARG	Y	112	40.852	-52.838	10.969	1.00	15.84
ATOM	12364	CA	ARG	Y	112	40.117	-54.035	11.397	1.00	15.70
ATOM	12365	C	ARG	Y	112	38.772	-53.934	10.660	1.00	17.20
ATOM	12366	O	ARG	Y	112	38.238	-52.823	10.478	1.00	22.37
ATOM	12367	CB	ARG	Y	112	39.932	-54.026	12.923	1.00	11.67
ATOM	12368	CG	ARG	Y	112	39.122	-52.842	13.475	1.00	7.51
ATOM	12369	CD	ARG	Y	112	37.687	-53.286	13.612	1.00	14.07
ATOM	12370	NE	ARG	Y	112	37.523	-54.357	14.602	1.00	13.14
ATOM	12371	CZ	ARG	Y	112	36.868	-55.500	14.409	1.00	4.02
ATOM	12372	NH1	ARG	Y	112	36.281	-55.774	13.246	1.00	2.00
ATOM	12373	NH2	ARG	Y	112	36.795	-56.359	15.417	1.00	2.00
ATOM	12374	N	THR	Y	113	38.225	-55.062	10.221	1.00	13.13
ATOM	12375	CA	THR	Y	113	36.974	-55.003	9.486	1.00	11.25
ATOM	12376	C	THR	Y	113	35.862	-54.299	10.259	1.00	12.45
ATOM	12377	O	THR	Y	113	35.754	-54.422	11.496	1.00	9.63
ATOM	12378	CB	THR	Y	113	36.473	-56.381	9.128	1.00	9.29
ATOM	12379	OG1	THR	Y	113	36.419	-57.180	10.305	1.00	15.40
ATOM	12380	CG2	THR	Y	113	37.372	-57.034	8.156	1.00	14.14
ATOM	12381	N	VAL	Y	114	35.006	-53.611	9.507	1.00	8.95
ATOM	12382	CA	VAL	Y	114	33.880	-52.902	10.077	1.00	8.41
ATOM	12383	C	VAL	Y	114	33.143	-53.848	11.057	1.00	13.92
ATOM	12384	O	VAL	Y	114	33.274	-55.097	10.995	1.00	16.89
ATOM	12385	CB	VAL	Y	114	32.920	-52.514	8.975	1.00	13.24
ATOM	12386	CG1	VAL	Y	114	31.532	-52.239	9.570	1.00	17.64
ATOM	12387	CG2	VAL	Y	114	33.454	-51.294	8.218	1.00	10.14
ATOM	12388	N	ALA	Y	115	32.329	-53.259	11.931	1.00	9.77
ATOM	12389	CA	ALA	Y	115	31.597	-54.032	12.922	1.00	5.36
ATOM	12390	C	ALA	Y	115	30.489	-53.142	13.340	1.00	8.93
ATOM	12391	O	ALA	Y	115	30.739	-52.030	13.750	1.00	7.91
ATOM	12392	CB	ALA	Y	115	32.454	-54.328	14.094	1.00	2.00
ATOM	12393	N	ALA	Y	116	29.253	-53.606	13.188	1.00	15.81
ATOM	12394	CA	ALA	Y	116	28.111	-52.793	13.575	1.00	10.53
ATOM	12395	C	ALA	Y	116	28.062	-52.758	15.085	1.00	7.52
ATOM	12396	O	ALA	Y	116	28.490	-53.688	15.764	1.00	9.83
ATOM	12397	CB	ALA	Y	116	26.858	-53.379	13.001	1.00	14.51
ATOM	12398	N	PRO	Y	117	27.554	-51.678	15.643	1.00	4.93
ATOM	12399	CA	PRO	Y	117	27.532	-51.673	17.094	1.00	5.80
ATOM	12400	C	PRO	Y	117	26.256	-52.295	17.605	1.00	13.56
ATOM	12401	O	PRO	Y	117	25.233	-52.287	16.914	1.00	16.82
ATOM	12402	CB	PRO	Y	117	27.546	-50.210	17.409	1.00	6.66
ATOM	12403	CG	PRO	Y	117	26.681	-49.645	16.324	1.00	2.00
ATOM	12404	CD	PRO	Y	117	26.971	-50.452	15.090	1.00	2.07
ATOM	12405	N	SER	Y	118	26.298	-52.819	18.823	1.00	18.35
ATOM	12406	CA	SER	Y	118	25.094	-53.375	19.434	1.00	21.55
ATOM	12407	C	SER	Y	118	24.658	-52.332	20.448	1.00	18.45
ATOM	12408	O	SER	Y	118	25.332	-52.150	21.451	1.00	18.56
ATOM	12409	CB	SER	Y	118	25.390	-54.703	20.155	1.00	21.78
ATOM	12410	OG	SER	Y	118	26.630	-54.660	20.832	1.00	28.85
ATOM	12411	N	VAL	Y	119	23.549	-51.646	20.197	1.00	14.79
ATOM	12412	CA	VAL	Y	119	23.101	-50.642	21.143	1.00	16.04
ATOM	12413	C	VAL	Y	119	22.192	-51.181	22.260	1.00	16.50
ATOM	12414	O	VAL	Y	119	21.487	-52.157	22.065	1.00	20.05
ATOM	12415	CB	VAL	Y	119	22.383	-49.520	20.408	1.00	17.45
ATOM	12416	CG1	VAL	Y	119	22.898	-49.409	19.016	1.00	18.13
ATOM	12417	CG2	VAL	Y	119	20.948	-49.795	20.358	1.00	20.02
ATOM	12418	N	PHE	Y	120	22.230	-50.552	23.430	1.00	18.69

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ATOM	12419	CA	PHE	Y	120	21.394	-50.934	24.577	1.00	21.04
ATOM	12420	C	PHE	Y	120	21.010	-49.688	25.353	1.00	24.55
ATOM	12421	O	PHE	Y	120	21.862	-48.878	25.704	1.00	28.93
ATOM	12422	CB	PHE	Y	120	22.128	-51.841	25.520	1.00	17.98
ATOM	12423	CG	PHE	Y	120	22.914	-52.873	24.854	1.00	18.69
ATOM	12424	CD1	PHE	Y	120	22.485	-54.183	24.870	1.00	26.68
ATOM	12425	CD2	PHE	Y	120	24.144	-52.576	24.324	1.00	21.96
ATOM	12426	CE1	PHE	Y	120	23.268	-55.212	24.383	1.00	29.35
ATOM	12427	CE2	PHE	Y	120	24.944	-53.591	23.830	1.00	27.66
ATOM	12428	CZ	PHE	Y	120	24.504	-54.921	23.865	1.00	30.90
ATOM	12429	N	ILE	Y	121	19.727	-49.540	25.659	1.00	28.51
ATOM	12430	CA	ILE	Y	121	19.268	-48.341	26.350	1.00	24.71
ATOM	12431	C	ILE	Y	121	18.837	-48.615	27.780	1.00	27.28
ATOM	12432	O	ILE	Y	121	18.042	-49.524	28.053	1.00	27.16
ATOM	12433	CB	ILE	Y	121	18.126	-47.675	25.546	1.00	15.83
ATOM	12434	CG1	ILE	Y	121	17.632	-46.461	26.276	1.00	7.00
ATOM	12435	CG2	ILE	Y	121	17.029	-48.651	25.265	1.00	10.69
ATOM	12436	CD1	ILE	Y	121	16.985	-45.547	25.330	1.00	11.69
ATOM	12437	N	PHE	Y	122	19.413	-47.848	28.694	1.00	27.98
ATOM	12438	CA	PHE	Y	122	19.094	-47.977	30.106	1.00	28.69
ATOM	12439	C	PHE	Y	122	18.290	-46.740	30.568	1.00	30.70
ATOM	12440	O	PHE	Y	122	18.706	-45.591	30.355	1.00	29.71
ATOM	12441	CB	PHE	Y	122	20.380	-48.104	30.927	1.00	28.31
ATOM	12442	CG	PHE	Y	122	21.270	-49.255	30.526	1.00	27.06
ATOM	12443	CD1	PHE	Y	122	21.403	-50.363	31.346	1.00	27.55
ATOM	12444	CD2	PHE	Y	122	22.031	-49.204	29.376	1.00	29.30
ATOM	12445	CE1	PHE	Y	122	22.289	-51.406	31.026	1.00	27.79
ATOM	12446	CE2	PHE	Y	122	22.915	-50.244	29.058	1.00	26.55
ATOM	12447	CZ	PHE	Y	122	23.041	-51.344	29.889	1.00	23.43
ATOM	12448	N	PRO	Y	123	17.119	-46.962	31.198	1.00	33.53
ATOM	12449	CA	PRO	Y	123	16.246	-45.894	31.692	1.00	31.59
ATOM	12450	C	PRO	Y	123	16.584	-45.644	33.149	1.00	33.23
ATOM	12451	O	PRO	Y	123	17.016	-46.553	33.855	1.00	35.90
ATOM	12452	CB	PRO	Y	123	14.867	-46.462	31.506	1.00	27.85
ATOM	12453	CG	PRO	Y	123	15.083	-47.967	31.228	1.00	33.51
ATOM	12454	CD	PRO	Y	123	16.516	-48.266	31.485	1.00	33.06
ATOM	12455	N	PRO	Y	124	16.352	-44.420	33.624	1.00	33.01
ATOM	12456	CA	PRO	Y	124	16.625	-43.936	34.977	1.00	34.31
ATOM	12457	C	PRO	Y	124	16.543	-44.892	36.146	1.00	41.26
ATOM	12458	O	PRO	Y	124	15.509	-45.491	36.423	1.00	45.61
ATOM	12459	CB	PRO	Y	124	15.691	-42.752	35.115	1.00	30.86
ATOM	12460	CG	PRO	Y	124	15.641	-42.203	33.754	1.00	29.76
ATOM	12461	CD	PRO	Y	124	15.671	-43.395	32.822	1.00	31.95
ATOM	12462	N	SER	Y	125	17.662	-45.031	36.840	1.00	47.93
ATOM	12463	CA	SER	Y	125	17.712	-45.886	38.014	1.00	53.71
ATOM	12464	C	SER	Y	125	16.655	-45.304	38.942	1.00	58.26
ATOM	12465	O	SER	Y	125	16.703	-44.108	39.292	1.00	59.55
ATOM	12466	CB	SER	Y	125	19.095	-45.795	38.671	1.00	56.06
ATOM	12467	OG	SER	Y	125	19.916	-44.829	38.011	1.00	64.78
ATOM	12468	N	ASP	Y	126	15.683	-46.128	39.316	1.00	61.14
ATOM	12469	CA	ASP	Y	126	14.637	-45.662	40.201	1.00	61.83
ATOM	12470	C	ASP	Y	126	15.344	-44.914	41.331	1.00	60.56
ATOM	12471	O	ASP	Y	126	14.963	-43.786	41.686	1.00	62.05
ATOM	12472	CB	ASP	Y	126	13.833	-46.858	40.731	1.00	66.91
ATOM	12473	CG	ASP	Y	126	12.616	-47.186	39.852	1.00	72.95
ATOM	12474	OD1	ASP	Y	126	12.187	-46.287	39.087	1.00	75.06
ATOM	12475	OD2	ASP	Y	126	12.092	-48.330	39.920	1.00	71.74
ATOM	12476	N	GLU	Y	127	16.407	-45.530	41.850	1.00	54.36
ATOM	12477	CA	GLU	Y	127	17.169	-44.947	42.934	1.00	51.76
ATOM	12478	C	GLU	Y	127	17.681	-43.553	42.610	1.00	51.05

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ATOM	12479	O	GLU	Y	127	17.755	-42.701	43.495	1.00	52.35
ATOM	12480	CB	GLU	Y	127	18.331	-45.856	43.303	1.00	52.45
ATOM	12481	CG	GLU	Y	127	19.280	-45.206	44.294	1.00	62.67
ATOM	12482	CD	GLU	Y	127	20.430	-46.113	44.709	1.00	67.11
ATOM	12483	OE1	GLU	Y	127	21.387	-45.602	45.337	1.00	69.10
ATOM	12484	OE2	GLU	Y	127	20.376	-47.333	44.413	1.00	67.58
ATOM	12485	N	GLN	Y	128	18.029	-43.333	41.342	1.00	50.28
ATOM	12486	CA	GLN	Y	128	18.539	-42.050	40.859	1.00	48.94
ATOM	12487	C	GLN	Y	128	17.435	-41.010	40.692	1.00	50.29
ATOM	12488	O	GLN	Y	128	17.691	-39.797	40.727	1.00	49.10
ATOM	12489	CB	GLN	Y	128	19.265	-42.238	39.526	1.00	47.15
ATOM	12490	CG	GLN	Y	128	20.139	-41.053	39.104	1.00	47.16
ATOM	12491	CD	GLN	Y	128	19.970	-40.739	37.633	1.00	44.48
ATOM	12492	OE1	GLN	Y	128	19.728	-41.643	36.830	1.00	45.39
ATOM	12493	NE2	GLN	Y	128	20.079	-39.462	37.271	1.00	37.98
ATOM	12494	N	LEU	Y	129	16.208	-41.484	40.506	1.00	50.32
ATOM	12495	CA	LEU	Y	129	15.082	-40.580	40.353	1.00	53.48
ATOM	12496	C	LEU	Y	129	14.690	-39.998	41.705	1.00	57.14
ATOM	12497	O	LEU	Y	129	14.106	-38.909	41.798	1.00	58.13
ATOM	12498	CB	LEU	Y	129	13.913	-41.310	39.721	1.00	48.33
ATOM	12499	CG	LEU	Y	129	14.103	-41.455	38.212	1.00	46.54
ATOM	12500	CD1	LEU	Y	129	13.441	-42.743	37.790	1.00	45.67
ATOM	12501	CD2	LEU	Y	129	13.541	-40.239	37.441	1.00	40.85
ATOM	12502	N	LYS	Y	130	15.051	-40.731	42.753	1.00	59.50
ATOM	12503	CA	LYS	Y	130	14.799	-40.329	44.126	1.00	62.36
ATOM	12504	C	LYS	Y	130	15.769	-39.198	44.462	1.00	62.09
ATOM	12505	O	LYS	Y	130	15.987	-38.870	45.625	1.00	64.39
ATOM	12506	CB	LYS	Y	130	15.048	-41.521	45.052	1.00	65.77
ATOM	12507	CG	LYS	Y	130	13.904	-41.857	46.013	1.00	70.45
ATOM	12508	CD	LYS	Y	130	12.548	-41.991	45.321	1.00	74.20
ATOM	12509	CE	LYS	Y	130	11.800	-43.238	45.816	1.00	76.74
ATOM	12510	NZ	LYS	Y	130	10.327	-42.995	46.031	1.00	79.97
ATOM	12511	N	SER	Y	131	16.358	-38.610	43.430	1.00	61.55
ATOM	12512	CA	SER	Y	131	17.301	-37.528	43.620	1.00	62.06
ATOM	12513	C	SER	Y	131	17.004	-36.364	42.676	1.00	61.21
ATOM	12514	O	SER	Y	131	17.832	-35.472	42.479	1.00	63.86
ATOM	12515	CB	SER	Y	131	18.716	-38.052	43.409	1.00	64.93
ATOM	12516	OG	SER	Y	131	18.735	-39.471	43.492	1.00	67.57
ATOM	12517	N	GLY	Y	132	15.814	-36.366	42.097	1.00	59.30
ATOM	12518	CA	GLY	Y	132	15.443	-35.268	41.225	1.00	59.60
ATOM	12519	C	GLY	Y	132	16.102	-35.234	39.872	1.00	59.36
ATOM	12520	O	GLY	Y	132	15.762	-34.392	39.030	1.00	58.64
ATOM	12521	N	THR	Y	133	17.056	-36.129	39.658	1.00	59.43
ATOM	12522	CA	THR	Y	133	17.717	-36.175	38.366	1.00	57.04
ATOM	12523	C	THR	Y	133	17.407	-37.467	37.668	1.00	53.42
ATOM	12524	O	THR	Y	133	17.406	-38.538	38.269	1.00	52.17
ATOM	12525	CB	THR	Y	133	19.256	-36.043	38.479	1.00	58.47
ATOM	12526	OG1	THR	Y	133	19.619	-35.690	39.820	1.00	60.61
ATOM	12527	CG2	THR	Y	133	19.756	-34.960	37.532	1.00	58.30
ATOM	12528	N	ALA	Y	134	17.126	-37.351	36.385	1.00	49.82
ATOM	12529	CA	ALA	Y	134	16.842	-38.512	35.582	1.00	47.92
ATOM	12530	C	ALA	Y	134	17.778	-38.443	34.382	1.00	45.42
ATOM	12531	O	ALA	Y	134	17.694	-37.510	33.575	1.00	45.02
ATOM	12532	CB	ALA	Y	134	15.388	-38.497	35.130	1.00	47.19
ATOM	12533	N	SER	Y	135	18.694	-39.402	34.283	1.00	39.79
ATOM	12534	CA	SER	Y	135	19.602	-39.437	33.148	1.00	34.02
ATOM	12535	C	SER	Y	135	19.483	-40.800	32.498	1.00	26.67
ATOM	12536	O	SER	Y	135	19.623	-41.805	33.175	1.00	17.84
ATOM	12537	CB	SER	Y	135	21.023	-39.239	33.623	1.00	39.19
ATOM	12538	OG	SER	Y	135	21.264	-40.127	34.693	1.00	43.28

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ATOM	12539	N	VAL	Y	136	19.215	-40.829	31.193	1.00	24.97
ATOM	12540	CA	VAL	Y	136	19.101	-42.096	30.459	1.00	26.78
ATOM	12541	C	VAL	Y	136	20.343	-42.344	29.587	1.00	26.52
ATOM	12542	O	VAL	Y	136	20.744	-41.507	28.765	1.00	26.00
ATOM	12543	CB	VAL	Y	136	17.883	-42.118	29.540	1.00	28.83
ATOM	12544	CG1	VAL	Y	136	17.758	-40.756	28.854	1.00	34.16
ATOM	12545	CG2	VAL	Y	136	18.010	-43.261	28.522	1.00	20.64
ATOM	12546	N	VAL	Y	137	20.942	-43.509	29.804	1.00	23.25
ATOM	12547	CA	VAL	Y	137	22.126	-43.935	29.104	1.00	17.91
ATOM	12548	C	VAL	Y	137	21.888	-44.934	28.002	1.00	19.82
ATOM	12549	O	VAL	Y	137	21.319	-46.000	28.191	1.00	16.75
ATOM	12550	CB	VAL	Y	137	23.080	-44.561	30.035	1.00	16.67
ATOM	12551	CG1	VAL	Y	137	24.144	-45.314	29.218	1.00	22.66
ATOM	12552	CG2	VAL	Y	137	23.641	-43.487	30.950	1.00	15.21
ATOM	12553	N	CYS	Y	138	22.403	-44.588	26.844	1.00	24.88
ATOM	12554	CA	CYS	Y	138	22.261	-45.404	25.673	1.00	24.02
ATOM	12555	C	CYS	Y	138	23.698	-45.936	25.470	1.00	22.10
ATOM	12556	O	CYS	Y	138	24.662	-45.257	25.809	1.00	25.71
ATOM	12557	CB	CYS	Y	138	21.737	-44.473	24.571	1.00	21.63
ATOM	12558	SG	CYS	Y	138	22.048	-45.109	22.924	1.00	31.05
ATOM	12559	N	LEU	Y	139	23.865	-47.157	24.987	1.00	20.12
ATOM	12560	CA	LEU	Y	139	25.220	-47.688	24.820	1.00	17.43
ATOM	12561	C	LEU	Y	139	25.488	-48.489	23.553	1.00	18.34
ATOM	12562	O	LEU	Y	139	24.866	-49.538	23.337	1.00	15.77
ATOM	12563	CB	LEU	Y	139	25.567	-48.568	26.011	1.00	14.01
ATOM	12564	CG	LEU	Y	139	26.495	-49.760	25.781	1.00	11.44
ATOM	12565	CD1	LEU	Y	139	27.920	-49.266	25.834	1.00	14.27
ATOM	12566	CD2	LEU	Y	139	26.310	-50.798	26.880	1.00	10.30
ATOM	12567	N	LEU	Y	140	26.459	-48.032	22.755	1.00	20.59
ATOM	12568	CA	LEU	Y	140	26.841	-48.743	21.515	1.00	24.53
ATOM	12569	C	LEU	Y	140	28.041	-49.671	21.811	1.00	22.82
ATOM	12570	O	LEU	Y	140	29.150	-49.186	21.932	1.00	24.19
ATOM	12571	CB	LEU	Y	140	27.226	-47.739	20.424	1.00	26.48
ATOM	12572	CG	LEU	Y	140	26.012	-46.967	19.883	1.00	37.62
ATOM	12573	CD1	LEU	Y	140	25.510	-45.975	20.966	1.00	35.71
ATOM	12574	CD2	LEU	Y	140	26.375	-46.246	18.577	1.00	34.36
ATOM	12575	N	ASN	Y	141	27.849	-50.981	21.956	1.00	20.24
ATOM	12576	CA	ASN	Y	141	29.004	-51.808	22.278	1.00	22.79
ATOM	12577	C	ASN	Y	141	29.765	-52.327	21.107	1.00	27.25
ATOM	12578	O	ASN	Y	141	29.192	-52.601	20.056	1.00	35.32
ATOM	12579	CB	ASN	Y	141	28.676	-53.019	23.157	1.00	21.48
ATOM	12580	CG	ASN	Y	141	29.907	-53.494	23.955	1.00	26.49
ATOM	12581	OD1	ASN	Y	141	29.981	-54.608	24.476	1.00	29.36
ATOM	12582	ND2	ASN	Y	141	30.891	-52.623	24.033	1.00	32.15
ATOM	12583	N	ASN	Y	142	31.070	-52.457	21.335	1.00	26.69
ATOM	12584	CA	ASN	Y	142	32.042	-52.969	20.405	1.00	25.08
ATOM	12585	C	ASN	Y	142	31.744	-52.760	18.908	1.00	25.74
ATOM	12586	O	ASN	Y	142	31.352	-53.685	18.156	1.00	25.95
ATOM	12587	CB	ASN	Y	142	32.283	-54.429	20.763	1.00	25.89
ATOM	12588	CG	ASN	Y	142	32.896	-54.578	22.137	1.00	37.15
ATOM	12589	OD1	ASN	Y	142	32.257	-55.030	23.102	1.00	42.44
ATOM	12590	ND2	ASN	Y	142	34.157	-54.186	22.239	1.00	45.61
ATOM	12591	N	PHE	Y	143	31.922	-51.507	18.495	1.00	21.58
ATOM	12592	CA	PHE	Y	143	31.741	-51.112	17.102	1.00	21.12
ATOM	12593	C	PHE	Y	143	33.070	-50.593	16.532	1.00	18.90
ATOM	12594	O	PHE	Y	143	34.060	-50.496	17.265	1.00	16.20
ATOM	12595	CB	PHE	Y	143	30.664	-50.033	16.961	1.00	19.61
ATOM	12596	CG	PHE	Y	143	30.980	-48.771	17.683	1.00	14.89
ATOM	12597	CD1	PHE	Y	143	30.647	-48.631	19.017	1.00	13.81
ATOM	12598	CD2	PHE	Y	143	31.593	-47.709	17.038	1.00	16.24



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ATOM	12599	CE1	PHE	Y	143	30.918	-47.442	19.719	1.00	10.42
ATOM	12600	CE2	PHE	Y	143	31.872	-46.505	17.738	1.00	12.47
ATOM	12601	CZ	PHE	Y	143	31.526	-46.384	19.087	1.00	8.91
ATOM	12602	N	TYR	Y	144	33.066	-50.313	15.219	1.00	16.39
ATOM	12603	CA	TYR	Y	144	34.218	-49.823	14.450	1.00	8.89
ATOM	12604	C	TYR	Y	144	33.690	-49.656	13.045	1.00	6.53
ATOM	12605	O	TYR	Y	144	32.960	-50.516	12.540	1.00	11.40
ATOM	12606	CB	TYR	Y	144	35.337	-50.852	14.428	1.00	12.52
ATOM	12607	CG	TYR	Y	144	36.541	-50.427	13.578	1.00	17.87
ATOM	12608	CD1	TYR	Y	144	37.710	-49.929	14.174	1.00	17.30
ATOM	12609	CD2	TYR	Y	144	36.466	-50.409	12.180	1.00	17.68
ATOM	12610	CE1	TYR	Y	144	38.748	-49.415	13.407	1.00	11.52
ATOM	12611	CE2	TYR	Y	144	37.499	-49.896	11.416	1.00	13.11
ATOM	12612	CZ	TYR	Y	144	38.629	-49.397	12.042	1.00	12.16
ATOM	12613	OH	TYR	Y	144	39.644	-48.862	11.299	1.00	13.32
ATOM	12614	N	PRO	Y	145	34.175	-48.649	12.321	1.00	4.25
ATOM	12615	CA	PRO	Y	145	35.086	-47.565	12.692	1.00	4.31
ATOM	12616	C	PRO	Y	145	34.515	-46.845	13.827	1.00	8.62
ATOM	12617	O	PRO	Y	145	33.440	-47.205	14.266	1.00	12.55
ATOM	12618	CB	PRO	Y	145	35.107	-46.666	11.480	1.00	4.13
ATOM	12619	CG	PRO	Y	145	34.559	-47.499	10.344	1.00	5.05
ATOM	12620	CD	PRO	Y	145	33.739	-48.589	10.916	1.00	6.69
ATOM	12621	N	ARG	Y	146	35.209	-45.807	14.283	1.00	10.65
ATOM	12622	CA	ARG	Y	146	34.760	-44.974	15.398	1.00	15.16
ATOM	12623	C	ARG	Y	146	33.689	-43.928	15.052	1.00	18.96
ATOM	12624	O	ARG	Y	146	33.064	-43.358	15.952	1.00	24.99
ATOM	12625	CB	ARG	Y	146	35.954	-44.260	16.017	1.00	13.43
ATOM	12626	CG	ARG	Y	146	35.679	-43.562	17.301	1.00	15.50
ATOM	12627	CD	ARG	Y	146	36.261	-42.161	17.291	1.00	23.79
ATOM	12628	NE	ARG	Y	146	36.390	-41.636	18.657	1.00	36.03
ATOM	12629	CZ	ARG	Y	146	35.387	-41.580	19.544	1.00	39.31
ATOM	12630	NH1	ARG	Y	146	34.167	-42.029	19.218	1.00	32.87
ATOM	12631	NH2	ARG	Y	146	35.607	-41.062	20.756	1.00	36.75
ATOM	12632	N	GLU	Y	147	33.480	-43.661	13.766	1.00	17.44
ATOM	12633	CA	GLU	Y	147	32.472	-42.686	13.361	1.00	16.12
ATOM	12634	C	GLU	Y	147	31.077	-43.283	13.666	1.00	18.26
ATOM	12635	O	GLU	Y	147	30.676	-44.350	13.115	1.00	17.72
ATOM	12636	CB	GLU	Y	147	32.626	-42.401	11.877	1.00	22.75
ATOM	12637	CG	GLU	Y	147	33.872	-41.639	11.509	1.00	30.64
ATOM	12638	CD	GLU	Y	147	35.043	-42.533	11.149	1.00	39.74
ATOM	12639	OE1	GLU	Y	147	36.138	-42.254	11.715	1.00	44.02
ATOM	12640	OE2	GLU	Y	147	34.866	-43.479	10.316	1.00	37.73
ATOM	12641	N	ALA	Y	148	30.340	-42.589	14.539	1.00	17.43
ATOM	12642	CA	ALA	Y	148	29.025	-43.068	14.986	1.00	18.91
ATOM	12643	C	ALA	Y	148	28.033	-42.004	15.460	1.00	15.90
ATOM	12644	O	ALA	Y	148	28.161	-41.515	16.579	1.00	16.86
ATOM	12645	CB	ALA	Y	148	29.218	-44.141	16.137	1.00	15.17
ATOM	12646	N	LYS	Y	149	27.034	-41.678	14.642	1.00	15.27
ATOM	12647	CA	LYS	Y	149	26.036	-40.699	15.051	1.00	16.10
ATOM	12648	C	LYS	Y	149	25.044	-41.346	15.983	1.00	20.05
ATOM	12649	O	LYS	Y	149	24.606	-42.472	15.756	1.00	21.60
ATOM	12650	CB	LYS	Y	149	25.270	-40.160	13.872	1.00	20.90
ATOM	12651	CG	LYS	Y	149	24.041	-39.347	14.273	1.00	27.86
ATOM	12652	CD	LYS	Y	149	23.880	-38.061	13.447	1.00	31.45
ATOM	12653	CE	LYS	Y	149	22.650	-38.106	12.548	1.00	33.87
ATOM	12654	NZ	LYS	Y	149	22.873	-38.741	11.213	1.00	39.16
ATOM	12655	N	VAL	Y	150	24.669	-40.597	17.011	1.00	20.28
ATOM	12656	CA	VAL	Y	150	23.752	-41.053	18.032	1.00	23.01
ATOM	12657	C	VAL	Y	150	22.825	-39.916	18.453	1.00	29.44
ATOM	12658	O	VAL	Y	150	23.114	-39.240	19.430	1.00	34.51

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ATOM	12659	CB	VAL	Y	150	24.539	-41.473	19.251	1.00	22.36
ATOM	12660	CG1	VAL	Y	150	23.830	-42.561	19.968	1.00	31.81
ATOM	12661	CG2	VAL	Y	150	25.911	-41.911	18.842	1.00	24.96
ATOM	12662	N	GLN	Y	151	21.722	-39.708	17.731	1.00	33.62
ATOM	12663	CA	GLN	Y	151	20.746	-38.644	18.024	1.00	32.26
ATOM	12664	C	GLN	Y	151	19.772	-39.120	19.090	1.00	32.82
ATOM	12665	O	GLN	Y	151	19.444	-40.304	19.127	1.00	35.26
ATOM	12666	CB	GLN	Y	151	19.928	-38.347	16.773	1.00	33.78
ATOM	12667	CG	GLN	Y	151	19.964	-36.940	16.288	1.00	38.82
ATOM	12668	CD	GLN	Y	151	19.837	-36.862	14.775	1.00	43.20
ATOM	12669	OE1	GLN	Y	151	20.413	-35.977	14.144	1.00	51.57
ATOM	12670	NE2	GLN	Y	151	19.077	-37.781	14.184	1.00	43.63
ATOM	12671	N	TRP	Y	152	19.286	-38.207	19.933	1.00	32.51
ATOM	12672	CA	TRP	Y	152	18.292	-38.567	20.970	1.00	32.22
ATOM	12673	C	TRP	Y	152	16.866	-38.020	20.633	1.00	34.30
ATOM	12674	O	TRP	Y	152	16.708	-36.929	20.071	1.00	32.42
ATOM	12675	CB	TRP	Y	152	18.703	-38.016	22.321	1.00	26.33
ATOM	12676	CG	TRP	Y	152	19.615	-38.856	23.092	1.00	22.30
ATOM	12677	CD1	TRP	Y	152	20.952	-38.677	23.219	1.00	20.43
ATOM	12678	CD2	TRP	Y	152	19.266	-39.951	23.958	1.00	24.23
ATOM	12679	NE1	TRP	Y	152	21.468	-39.576	24.112	1.00	18.79
ATOM	12680	CE2	TRP	Y	152	20.459	-40.376	24.584	1.00	23.48
ATOM	12681	CE3	TRP	Y	152	18.064	-40.610	24.273	1.00	24.57
ATOM	12682	CZ2	TRP	Y	152	20.491	-41.442	25.513	1.00	21.90
ATOM	12683	CZ3	TRP	Y	152	18.094	-41.672	25.205	1.00	23.55
ATOM	12684	CH2	TRP	Y	152	19.307	-42.070	25.808	1.00	24.93
ATOM	12685	N	LYS	Y	153	15.825	-38.770	20.975	1.00	36.35
ATOM	12686	CA	LYS	Y	153	14.464	-38.323	20.683	1.00	38.57
ATOM	12687	C	LYS	Y	153	13.517	-38.600	21.844	1.00	42.57
ATOM	12688	O	LYS	Y	153	13.297	-39.764	22.212	1.00	45.28
ATOM	12689	CB	LYS	Y	153	13.957	-39.009	19.425	1.00	35.05
ATOM	12690	CG	LYS	Y	153	14.711	-38.552	18.209	1.00	42.94
ATOM	12691	CD	LYS	Y	153	13.968	-38.879	16.896	1.00	50.17
ATOM	12692	CE	LYS	Y	153	14.837	-39.679	15.899	1.00	52.49
ATOM	12693	NZ	LYS	Y	153	14.540	-41.143	15.973	1.00	55.06
ATOM	12694	N	VAL	Y	154	12.991	-37.523	22.435	1.00	44.28
ATOM	12695	CA	VAL	Y	154	12.049	-37.612	23.554	1.00	43.82
ATOM	12696	C	VAL	Y	154	10.629	-37.276	23.125	1.00	45.01
ATOM	12697	O	VAL	Y	154	10.335	-36.148	22.744	1.00	41.73
ATOM	12698	CB	VAL	Y	154	12.411	-36.665	24.690	1.00	41.00
ATOM	12699	CG1	VAL	Y	154	11.448	-36.865	25.798	1.00	39.88
ATOM	12700	CG2	VAL	Y	154	13.824	-36.939	25.188	1.00	42.08
ATOM	12701	N	ASP	Y	155	9.750	-38.271	23.227	1.00	50.55
ATOM	12702	CA	ASP	Y	155	8.350	-38.148	22.834	1.00	53.61
ATOM	12703	C	ASP	Y	155	8.298	-37.580	21.429	1.00	53.27
ATOM	12704	O	ASP	Y	155	7.574	-36.639	21.151	1.00	51.59
ATOM	12705	CB	ASP	Y	155	7.592	-37.247	23.815	1.00	57.70
ATOM	12706	CG	ASP	Y	155	7.122	-38.002	25.055	1.00	61.68
ATOM	12707	OD1	ASP	Y	155	7.420	-39.210	25.166	1.00	62.29
ATOM	12708	OD2	ASP	Y	155	6.453	-37.394	25.921	1.00	65.67
ATOM	12709	N	ASN	Y	156	9.101	-38.172	20.553	1.00	57.01
ATOM	12710	CA	ASN	Y	156	9.183	-37.772	19.153	1.00	59.77
ATOM	12711	C	ASN	Y	156	9.912	-36.461	19.000	1.00	57.28
ATOM	12712	O	ASN	Y	156	10.248	-36.063	17.889	1.00	56.97
ATOM	12713	CB	ASN	Y	156	7.788	-37.645	18.538	1.00	68.00
ATOM	12714	CG	ASN	Y	156	6.882	-38.842	18.852	1.00	76.54
ATOM	12715	OD1	ASN	Y	156	7.336	-39.998	18.933	1.00	77.77
ATOM	12716	ND2	ASN	Y	156	5.584	-38.567	19.013	1.00	78.77
ATOM	12717	N	ALA	Y	157	10.147	-35.786	20.114	1.00	55.58
ATOM	12718	CA	ALA	Y	157	10.849	-34.514	20.084	1.00	57.17

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ATOM	12719	C	ALA	Y	157	12.353	-34.763	19.958	1.00	57.65
ATOM	12720	O	ALA	Y	157	13.009	-35.134	20.939	1.00	59.44
ATOM	12721	CB	ALA	Y	157	10.543	-33.731	21.360	1.00	61.33
ATOM	12722	N	LEU	Y	158	12.901	-34.560	18.758	1.00	56.27
ATOM	12723	CA	LEU	Y	158	14.332	-34.793	18.535	1.00	55.09
ATOM	12724	C	LEU	Y	158	15.214	-33.964	19.445	1.00	52.68
ATOM	12725	O	LEU	Y	158	15.415	-32.775	19.212	1.00	48.51
ATOM	12726	CB	LEU	Y	158	14.718	-34.510	17.074	1.00	60.30
ATOM	12727	CG	LEU	Y	158	16.198	-34.560	16.632	1.00	62.55
ATOM	12728	CD1	LEU	Y	158	16.774	-33.153	16.649	1.00	60.97
ATOM	12729	CD2	LEU	Y	158	17.019	-35.486	17.542	1.00	63.89
ATOM	12730	N	GLN	Y	159	15.731	-34.610	20.487	1.00	53.55
ATOM	12731	CA	GLN	Y	159	16.620	-33.969	21.448	1.00	52.27
ATOM	12732	C	GLN	Y	159	17.674	-33.228	20.673	1.00	50.32
ATOM	12733	O	GLN	Y	159	17.859	-33.498	19.488	1.00	51.35
ATOM	12734	CB	GLN	Y	159	17.294	-35.023	22.319	1.00	55.32
ATOM	12735	CG	GLN	Y	159	16.419	-35.532	23.415	1.00	55.86
ATOM	12736	CD	GLN	Y	159	15.789	-34.402	24.166	1.00	57.71
ATOM	12737	OE1	GLN	Y	159	14.902	-33.718	23.635	1.00	52.80
ATOM	12738	NE2	GLN	Y	159	16.244	-34.181	25.412	1.00	59.02
ATOM	12739	N	SER	Y	160	18.362	-32.297	21.320	1.00	46.85
ATOM	12740	CA	SER	Y	160	19.400	-31.540	20.629	1.00	49.72
ATOM	12741	C	SER	Y	160	20.038	-30.557	21.558	1.00	47.24
ATOM	12742	O	SER	Y	160	21.029	-29.905	21.223	1.00	47.44
ATOM	12743	CB	SER	Y	160	18.844	-30.768	19.430	1.00	54.37
ATOM	12744	OG	SER	Y	160	19.768	-29.770	19.011	1.00	59.25
ATOM	12745	N	GLY	Y	161	19.434	-30.411	22.718	1.00	45.88
ATOM	12746	CA	GLY	Y	161	20.005	-29.510	23.687	1.00	45.45
ATOM	12747	C	GLY	Y	161	21.185	-30.173	24.366	1.00	44.15
ATOM	12748	O	GLY	Y	161	22.333	-29.960	23.989	1.00	41.51
ATOM	12749	N	ASN	Y	162	20.915	-31.014	25.355	1.00	45.40
ATOM	12750	CA	ASN	Y	162	22.019	-31.625	26.047	1.00	48.68
ATOM	12751	C	ASN	Y	162	21.997	-33.111	26.322	1.00	50.31
ATOM	12752	O	ASN	Y	162	21.055	-33.645	26.919	1.00	52.95
ATOM	12753	CB	ASN	Y	162	22.265	-30.862	27.338	1.00	52.86
ATOM	12754	CG	ASN	Y	162	22.953	-29.534	27.089	1.00	55.99
ATOM	12755	OD1	ASN	Y	162	23.231	-29.168	25.944	1.00	55.92
ATOM	12756	ND2	ASN	Y	162	23.235	-28.804	28.161	1.00	59.88
ATOM	12757	N	SER	Y	163	23.083	-33.742	25.859	1.00	48.17
ATOM	12758	CA	SER	Y	163	23.391	-35.170	25.984	1.00	41.75
ATOM	12759	C	SER	Y	163	24.909	-35.192	25.892	1.00	38.95
ATOM	12760	O	SER	Y	163	25.494	-34.338	25.233	1.00	40.69
ATOM	12761	CB	SER	Y	163	22.813	-35.991	24.825	1.00	39.40
ATOM	12762	OG	SER	Y	163	23.006	-35.329	23.592	1.00	38.92
ATOM	12763	N	GLN	Y	164	25.542	-36.155	26.550	1.00	34.84
ATOM	12764	CA	GLN	Y	164	26.984	-36.265	26.559	1.00	25.60
ATOM	12765	C	GLN	Y	164	27.475	-37.656	26.183	1.00	24.41
ATOM	12766	O	GLN	Y	164	27.098	-38.646	26.825	1.00	18.51
ATOM	12767	CB	GLN	Y	164	27.506	-35.900	27.953	1.00	24.18
ATOM	12768	CG	GLN	Y	164	27.789	-34.405	28.159	1.00	27.44
ATOM	12769	CD	GLN	Y	164	28.468	-34.108	29.495	1.00	31.38
ATOM	12770	OE1	GLN	Y	164	28.579	-34.988	30.350	1.00	35.48
ATOM	12771	NE2	GLN	Y	164	28.904	-32.865	29.683	1.00	29.02
ATOM	12772	N	GLU	Y	165	28.337	-37.701	25.151	1.00	25.95
ATOM	12773	CA	GLU	Y	165	28.988	-38.927	24.644	1.00	17.27
ATOM	12774	C	GLU	Y	165	30.387	-39.124	25.313	1.00	11.11
ATOM	12775	O	GLU	Y	165	31.044	-38.188	25.787	1.00	3.11
ATOM	12776	CB	GLU	Y	165	29.190	-38.847	23.123	1.00	19.61
ATOM	12777	CG	GLU	Y	165	27.935	-38.963	22.258	1.00	29.39
ATOM	12778	CD	GLU	Y	165	28.273	-39.175	20.767	1.00	36.54

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ATOM	12779	OE1	GLU	Y	165	29.482	-39.274	20.456	1.00	45.64
ATOM	12780	OE2	GLU	Y	165	27.359	-39.243	19.900	1.00	34.10
ATOM	12781	N	SER	Y	166	30.802	-40.369	25.419	1.00	7.67
ATOM	12782	CA	SER	Y	166	32.119	-40.663	25.945	1.00	7.55
ATOM	12783	C	SER	Y	166	32.493	-41.948	25.226	1.00	10.63
ATOM	12784	O	SER	Y	166	31.611	-42.822	25.021	1.00	7.15
ATOM	12785	CB	SER	Y	166	32.090	-40.887	27.424	1.00	10.05
ATOM	12786	OG	SER	Y	166	33.264	-41.586	27.774	1.00	17.09
ATOM	12787	N	VAL	Y	167	33.780	-42.055	24.835	1.00	11.10
ATOM	12788	CA	VAL	Y	167	34.254	-43.223	24.065	1.00	11.44
ATOM	12789	C	VAL	Y	167	35.415	-44.024	24.650	1.00	9.33
ATOM	12790	O	VAL	Y	167	36.055	-43.614	25.596	1.00	16.43
ATOM	12791	CB	VAL	Y	167	34.577	-42.825	22.592	1.00	2.00
ATOM	12792	CG1	VAL	Y	167	34.877	-44.016	21.802	1.00	2.00
ATOM	12793	CG2	VAL	Y	167	33.352	-42.231	21.955	1.00	4.94
ATOM	12794	N	THR	Y	168	35.665	-45.203	24.144	1.00	3.63
ATOM	12795	CA	THR	Y	168	36.784	-45.923	24.688	1.00	5.09
ATOM	12796	C	THR	Y	168	37.855	-46.098	23.593	1.00	11.57
ATOM	12797	O	THR	Y	168	37.573	-45.946	22.395	1.00	14.03
ATOM	12798	CB	THR	Y	168	36.324	-47.273	25.171	1.00	10.01
ATOM	12799	OG1	THR	Y	168	35.603	-47.948	24.114	1.00	12.51
ATOM	12800	CG2	THR	Y	168	35.461	-47.091	26.385	1.00	7.94
ATOM	12801	N	GLU	Y	169	39.086	-46.410	23.993	1.00	13.32
ATOM	12802	CA	GLU	Y	169	40.158	-46.643	23.025	1.00	15.30
ATOM	12803	C	GLU	Y	169	39.961	-48.011	22.416	1.00	13.11
ATOM	12804	O	GLU	Y	169	39.352	-48.885	23.027	1.00	13.76
ATOM	12805	CB	GLU	Y	169	41.525	-46.575	23.698	1.00	23.65
ATOM	12806	CG	GLU	Y	169	42.400	-45.359	23.307	1.00	33.28
ATOM	12807	CD	GLU	Y	169	41.622	-44.056	23.156	1.00	38.73
ATOM	12808	OE1	GLU	Y	169	40.555	-43.891	23.800	1.00	36.97
ATOM	12809	OE2	GLU	Y	169	42.096	-43.191	22.380	1.00	45.00
ATOM	12810	N	GLN	Y	170	40.446	-48.202	21.201	1.00	13.23
ATOM	12811	CA	GLN	Y	170	40.248	-49.497	20.574	1.00	18.41
ATOM	12812	C	GLN	Y	170	40.411	-50.632	21.579	1.00	19.30
ATOM	12813	O	GLN	Y	170	41.295	-50.597	22.420	1.00	17.96
ATOM	12814	CB	GLN	Y	170	41.205	-49.673	19.411	1.00	15.06
ATOM	12815	CG	GLN	Y	170	41.090	-48.600	18.401	1.00	11.57
ATOM	12816	CD	GLN	Y	170	41.702	-49.034	17.108	1.00	14.25
ATOM	12817	OE1	GLN	Y	170	41.032	-49.630	16.278	1.00	10.50
ATOM	12818	NE2	GLN	Y	170	42.996	-48.765	16.934	1.00	15.44
ATOM	12819	N	ASP	Y	171	39.529	-51.620	21.528	1.00	25.04
ATOM	12820	CA	ASP	Y	171	39.629	-52.738	22.468	1.00	33.20
ATOM	12821	C	ASP	Y	171	40.924	-53.512	22.285	1.00	33.07
ATOM	12822	O	ASP	Y	171	41.368	-53.739	21.154	1.00	34.43
ATOM	12823	CB	ASP	Y	171	38.436	-53.699	22.320	1.00	36.84
ATOM	12824	CG	ASP	Y	171	38.245	-54.611	23.546	1.00	41.93
ATOM	12825	OD1	ASP	Y	171	38.977	-54.463	24.558	1.00	44.21
ATOM	12826	OD2	ASP	Y	171	37.352	-55.488	23.499	1.00	46.87
ATOM	12827	N	SER	Y	172	41.508	-53.930	23.407	1.00	31.48
ATOM	12828	CA	SER	Y	172	42.750	-54.674	23.389	1.00	28.29
ATOM	12829	C	SER	Y	172	42.494	-56.062	22.852	1.00	25.52
ATOM	12830	O	SER	Y	172	43.427	-56.771	22.518	1.00	30.36
ATOM	12831	CB	SER	Y	172	43.331	-54.762	24.787	1.00	29.17
ATOM	12832	OG	SER	Y	172	42.574	-55.666	25.564	1.00	41.51
ATOM	12833	N	LYS	Y	173	41.232	-56.446	22.749	1.00	25.01
ATOM	12834	CA	LYS	Y	173	40.891	-57.769	22.238	1.00	27.14
ATOM	12835	C	LYS	Y	173	40.399	-57.743	20.784	1.00	26.06
ATOM	12836	O	LYS	Y	173	40.995	-58.386	19.933	1.00	29.71
ATOM	12837	CB	LYS	Y	173	39.823	-58.410	23.106	1.00	34.08
ATOM	12838	CG	LYS	Y	173	40.300	-59.403	24.123	1.00	41.14

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ATOM	12839	CD	LYS	Y	173	39.093	-59.910	24.964	1.00	54.89
ATOM	12840	CE	LYS	Y	173	38.999	-59.208	26.358	1.00	62.94
ATOM	12841	NZ	LYS	Y	173	37.619	-58.783	26.809	1.00	63.24
ATOM	12842	N	ASP	Y	174	39.319	-57.017	20.492	1.00	21.48
ATOM	12843	CA	ASP	Y	174	38.783	-56.949	19.124	1.00	18.90
ATOM	12844	C	ASP	Y	174	39.092	-55.626	18.384	1.00	19.75
ATOM	12845	O	ASP	Y	174	38.661	-55.397	17.231	1.00	12.40
ATOM	12846	CB	ASP	Y	174	37.290	-57.130	19.179	1.00	19.44
ATOM	12847	CG	ASP	Y	174	36.633	-56.139	20.100	1.00	25.08
ATOM	12848	OD1	ASP	Y	174	37.199	-55.037	20.371	1.00	22.61
ATOM	12849	OD2	ASP	Y	174	35.529	-56.493	20.549	1.00	29.79
ATOM	12850	N	SER	Y	175	39.837	-54.754	19.052	1.00	21.05
ATOM	12851	CA	SER	Y	175	40.186	-53.475	18.460	1.00	22.86
ATOM	12852	C	SER	Y	175	38.918	-52.782	17.974	1.00	22.91
ATOM	12853	O	SER	Y	175	38.813	-52.400	16.798	1.00	22.49
ATOM	12854	CB	SER	Y	175	41.149	-53.714	17.301	1.00	23.33
ATOM	12855	OG	SER	Y	175	42.233	-54.502	17.753	1.00	19.98
ATOM	12856	N	THR	Y	176	37.947	-52.649	18.874	1.00	20.12
ATOM	12857	CA	THR	Y	176	36.691	-52.015	18.503	1.00	19.15
ATOM	12858	C	THR	Y	176	36.260	-51.052	19.559	1.00	19.84
ATOM	12859	O	THR	Y	176	36.532	-51.277	20.737	1.00	25.92
ATOM	12860	CB	THR	Y	176	35.561	-53.023	18.367	1.00	13.13
ATOM	12861	OG1	THR	Y	176	35.387	-53.685	19.623	1.00	11.47
ATOM	12862	CG2	THR	Y	176	35.873	-54.045	17.289	1.00	12.32
ATOM	12863	N	TYR	Y	177	35.544	-50.015	19.132	1.00	15.67
ATOM	12864	CA	TYR	Y	177	35.039	-48.994	20.026	1.00	16.80
ATOM	12865	C	TYR	Y	177	33.742	-49.328	20.778	1.00	18.38
ATOM	12866	O	TYR	Y	177	33.073	-50.341	20.519	1.00	19.80
ATOM	12867	CB	TYR	Y	177	34.830	-47.718	19.243	1.00	16.53
ATOM	12868	CG	TYR	Y	177	36.103	-47.215	18.655	1.00	14.93
ATOM	12869	CD1	TYR	Y	177	37.132	-46.749	19.485	1.00	10.63
ATOM	12870	CD2	TYR	Y	177	36.325	-47.290	17.281	1.00	15.50
ATOM	12871	CE1	TYR	Y	177	38.362	-46.376	18.970	1.00	11.56
ATOM	12872	CE2	TYR	Y	177	37.541	-46.928	16.749	1.00	15.72
ATOM	12873	CZ	TYR	Y	177	38.572	-46.469	17.608	1.00	15.59
ATOM	12874	OH	TYR	Y	177	39.833	-46.117	17.150	1.00	20.10
ATOM	12875	N	SER	Y	178	33.404	-48.453	21.720	1.00	15.21
ATOM	12876	CA	SER	Y	178	32.191	-48.576	22.520	1.00	17.47
ATOM	12877	C	SER	Y	178	32.008	-47.176	23.014	1.00	21.06
ATOM	12878	O	SER	Y	178	32.901	-46.642	23.671	1.00	26.04
ATOM	12879	CB	SER	Y	178	32.377	-49.516	23.707	1.00	13.89
ATOM	12880	OG	SER	Y	178	32.558	-50.851	23.266	1.00	16.84
ATOM	12881	N	LEU	Y	179	30.880	-46.570	22.666	1.00	20.89
ATOM	12882	CA	LEU	Y	179	30.586	-45.200	23.062	1.00	22.60
ATOM	12883	C	LEU	Y	179	29.406	-45.183	24.029	1.00	25.23
ATOM	12884	O	LEU	Y	179	28.626	-46.136	24.088	1.00	29.71
ATOM	12885	CB	LEU	Y	179	30.274	-44.393	21.797	1.00	19.82
ATOM	12886	CG	LEU	Y	179	29.564	-43.038	21.757	1.00	20.58
ATOM	12887	CD1	LEU	Y	179	29.301	-42.663	20.311	1.00	17.52
ATOM	12888	CD2	LEU	Y	179	28.251	-43.113	22.456	1.00	24.94
ATOM	12889	N	SER	Y	180	29.266	-44.111	24.797	1.00	23.67
ATOM	12890	CA	SER	Y	180	28.146	-44.044	25.715	1.00	22.98
ATOM	12891	C	SER	Y	180	27.478	-42.684	25.747	1.00	23.96
ATOM	12892	O	SER	Y	180	27.955	-41.759	26.401	1.00	25.16
ATOM	12893	CB	SER	Y	180	28.593	-44.444	27.121	1.00	24.55
ATOM	12894	OG	SER	Y	180	29.341	-43.421	27.758	1.00	26.22
ATOM	12895	N	SER	Y	181	26.354	-42.569	25.046	1.00	25.10
ATOM	12896	CA	SER	Y	181	25.614	-41.312	24.999	1.00	26.77
ATOM	12897	C	SER	Y	181	24.641	-41.238	26.154	1.00	25.94
ATOM	12898	O	SER	Y	181	23.790	-42.108	26.275	1.00	23.91

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ATOM	12899	CB	SER	Y	181	24.826	-41.184	23.712	1.00	25.99
ATOM	12900	OG	SER	Y	181	24.154	-39.930	23.730	1.00	32.43
ATOM	12901	N	THR	Y	182	24.743	-40.198	26.980	1.00	25.36
ATOM	12902	CA	THR	Y	182	23.875	-40.097	28.140	1.00	24.95
ATOM	12903	C	THR	Y	182	22.943	-38.937	28.193	1.00	26.48
ATOM	12904	O	THR	Y	182	23.357	-37.900	28.682	1.00	35.85
ATOM	12905	CB	THR	Y	182	24.682	-40.004	29.444	1.00	25.02
ATOM	12906	OG1	THR	Y	182	25.663	-41.046	29.485	1.00	34.01
ATOM	12907	CG2	THR	Y	182	23.779	-40.174	30.633	1.00	26.56
ATOM	12908	N	LEU	Y	183	21.697	-39.091	27.731	1.00	26.68
ATOM	12909	CA	LEU	Y	183	20.715	-38.003	27.802	1.00	22.43
ATOM	12910	C	LEU	Y	183	20.462	-37.764	29.262	1.00	24.08
ATOM	12911	O	LEU	Y	183	20.497	-38.700	30.079	1.00	17.53
ATOM	12912	CB	LEU	Y	183	19.400	-38.370	27.147	1.00	20.12
ATOM	12913	CG	LEU	Y	183	18.453	-37.179	27.128	1.00	19.06
ATOM	12914	CD1	LEU	Y	183	18.272	-36.637	25.734	1.00	19.16
ATOM	12915	CD2	LEU	Y	183	17.127	-37.639	27.622	1.00	19.25
ATOM	12916	N	THR	Y	184	20.221	-36.510	29.600	1.00	27.18
ATOM	12917	CA	THR	Y	184	19.993	-36.193	30.994	1.00	34.72
ATOM	12918	C	THR	Y	184	18.930	-35.103	31.217	1.00	37.53
ATOM	12919	O	THR	Y	184	19.156	-33.928	30.920	1.00	33.51
ATOM	12920	CB	THR	Y	184	21.332	-35.808	31.660	1.00	33.12
ATOM	12921	OG1	THR	Y	184	21.209	-35.864	33.082	1.00	38.35
ATOM	12922	CG2	THR	Y	184	21.746	-34.417	31.248	1.00	34.96
ATOM	12923	N	LEU	Y	185	17.772	-35.530	31.742	1.00	41.41
ATOM	12924	CA	LEU	Y	185	16.632	-34.658	32.027	1.00	42.77
ATOM	12925	C	LEU	Y	185	16.437	-34.462	33.512	1.00	46.46
ATOM	12926	O	LEU	Y	185	17.060	-35.142	34.330	1.00	48.63
ATOM	12927	CB	LEU	Y	185	15.347	-35.253	31.455	1.00	39.59
ATOM	12928	CG	LEU	Y	185	15.336	-35.473	29.939	1.00	39.71
ATOM	12929	CD1	LEU	Y	185	13.924	-35.690	29.398	1.00	35.80
ATOM	12930	CD2	LEU	Y	185	15.965	-34.274	29.289	1.00	41.05
ATOM	12931	N	SER	Y	186	15.570	-33.517	33.850	1.00	49.53
ATOM	12932	CA	SER	Y	186	15.250	-33.228	35.244	1.00	54.70
ATOM	12933	C	SER	Y	186	14.135	-34.197	35.623	1.00	56.51
ATOM	12934	O	SER	Y	186	13.192	-34.389	34.840	1.00	57.09
ATOM	12935	CB	SER	Y	186	14.741	-31.792	35.393	1.00	56.44
ATOM	12936	OG	SER	Y	186	13.511	-31.612	34.705	1.00	57.58
ATOM	12937	N	LYS	Y	187	14.232	-34.806	36.804	1.00	55.58
ATOM	12938	CA	LYS	Y	187	13.203	-35.762	37.232	1.00	54.59
ATOM	12939	C	LYS	Y	187	11.859	-35.310	36.713	1.00	49.02
ATOM	12940	O	LYS	Y	187	11.039	-36.109	36.278	1.00	40.28
ATOM	12941	CB	LYS	Y	187	13.152	-35.873	38.760	1.00	59.96
ATOM	12942	CG	LYS	Y	187	12.184	-36.934	39.290	1.00	61.26
ATOM	12943	CD	LYS	Y	187	10.815	-36.295	39.576	1.00	67.47
ATOM	12944	CE	LYS	Y	187	10.333	-36.549	41.000	1.00	66.18
ATOM	12945	NZ	LYS	Y	187	10.934	-37.801	41.525	1.00	67.20
ATOM	12946	N	ALA	Y	188	11.670	-34.002	36.752	1.00	48.94
ATOM	12947	CA	ALA	Y	188	10.452	-33.396	36.286	1.00	51.57
ATOM	12948	C	ALA	Y	188	10.287	-33.730	34.819	1.00	52.79
ATOM	12949	O	ALA	Y	188	9.465	-34.563	34.445	1.00	53.49
ATOM	12950	CB	ALA	Y	188	10.521	-31.886	36.480	1.00	52.92
ATOM	12951	N	ASP	Y	189	11.081	-33.073	33.992	1.00	52.70
ATOM	12952	CA	ASP	Y	189	11.009	-33.279	32.571	1.00	52.12
ATOM	12953	C	ASP	Y	189	10.866	-34.745	32.249	1.00	52.04
ATOM	12954	O	ASP	Y	189	10.052	-35.124	31.413	1.00	49.44
ATOM	12955	CB	ASP	Y	189	12.253	-32.715	31.914	1.00	57.08
ATOM	12956	CG	ASP	Y	189	12.124	-31.242	31.619	1.00	64.37
ATOM	12957	OD1	ASP	Y	189	11.920	-30.458	32.571	1.00	68.10
ATOM	12958	OD2	ASP	Y	189	12.225	-30.858	30.438	1.00	71.32

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ATOM	12959	N	TYR	Y	190	11.641	-35.582	32.925	1.00	53.62
ATOM	12960	CA	TYR	Y	190	11.581	-37.007	32.635	1.00	54.59
ATOM	12961	C	TYR	Y	190	10.177	-37.536	32.861	1.00	56.84
ATOM	12962	O	TYR	Y	190	9.569	-38.093	31.944	1.00	56.19
ATOM	12963	CB	TYR	Y	190	12.598	-37.786	33.473	1.00	52.10
ATOM	12964	CG	TYR	Y	190	12.572	-39.255	33.189	1.00	44.24
ATOM	12965	CD1	TYR	Y	190	12.714	-39.710	31.906	1.00	41.14
ATOM	12966	CD2	TYR	Y	190	12.386	-40.183	34.205	1.00	40.15
ATOM	12967	CE1	TYR	Y	190	12.674	-41.050	31.624	1.00	42.12
ATOM	12968	CE2	TYR	Y	190	12.343	-41.527	33.940	1.00	39.51
ATOM	12969	CZ	TYR	Y	190	12.490	-41.962	32.642	1.00	40.49
ATOM	12970	OH	TYR	Y	190	12.468	-43.311	32.352	1.00	40.04
ATOM	12971	N	GLU	Y	191	9.659	-37.341	34.076	1.00	59.44
ATOM	12972	CA	GLU	Y	191	8.313	-37.787	34.428	1.00	59.57
ATOM	12973	C	GLU	Y	191	7.278	-37.134	33.503	1.00	58.45
ATOM	12974	O	GLU	Y	191	6.139	-37.582	33.416	1.00	55.26
ATOM	12975	CB	GLU	Y	191	8.022	-37.442	35.894	1.00	62.77
ATOM	12976	CG	GLU	Y	191	8.121	-38.628	36.844	1.00	66.79
ATOM	12977	CD	GLU	Y	191	8.535	-38.235	38.259	1.00	68.27
ATOM	12978	OE1	GLU	Y	191	9.466	-38.870	38.786	1.00	72.45
ATOM	12979	OE2	GLU	Y	191	7.943	-37.306	38.853	1.00	66.63
ATOM	12980	N	LYS	Y	192	7.707	-36.097	32.787	1.00	58.52
ATOM	12981	CA	LYS	Y	192	6.847	-35.367	31.868	1.00	57.96
ATOM	12982	C	LYS	Y	192	6.617	-36.052	30.522	1.00	57.08
ATOM	12983	O	LYS	Y	192	5.694	-35.680	29.804	1.00	57.21
ATOM	12984	CB	LYS	Y	192	7.423	-33.967	31.617	1.00	62.95
ATOM	12985	CG	LYS	Y	192	8.112	-33.779	30.248	1.00	65.39
ATOM	12986	CD	LYS	Y	192	8.808	-32.413	30.121	1.00	66.57
ATOM	12987	CE	LYS	Y	192	10.131	-32.502	29.375	1.00	63.76
ATOM	12988	NZ	LYS	Y	192	10.232	-31.570	28.216	1.00	61.69
ATOM	12989	N	HIS	Y	193	7.432	-37.047	30.169	1.00	54.83
ATOM	12990	CA	HIS	Y	193	7.256	-37.706	28.870	1.00	49.58
ATOM	12991	C	HIS	Y	193	7.066	-39.217	28.828	1.00	45.97
ATOM	12992	O	HIS	Y	193	7.276	-39.922	29.805	1.00	45.70
ATOM	12993	CB	HIS	Y	193	8.399	-37.305	27.962	1.00	49.56
ATOM	12994	CG	HIS	Y	193	8.348	-35.869	27.572	1.00	48.39
ATOM	12995	ND1	HIS	Y	193	7.243	-35.308	26.978	1.00	49.44
ATOM	12996	CD2	HIS	Y	193	9.246	-34.870	27.716	1.00	50.10
ATOM	12997	CE1	HIS	Y	193	7.462	-34.025	26.764	1.00	51.50
ATOM	12998	NE2	HIS	Y	193	8.673	-33.735	27.203	1.00	49.79
ATOM	12999	N	LYS	Y	194	6.672	-39.723	27.673	1.00	41.33
ATOM	13000	CA	LYS	Y	194	6.431	-41.145	27.554	1.00	41.87
ATOM	13001	C	LYS	Y	194	7.556	-41.971	26.990	1.00	41.10
ATOM	13002	O	LYS	Y	194	8.063	-42.872	27.664	1.00	40.44
ATOM	13003	CB	LYS	Y	194	5.200	-41.392	26.699	1.00	48.88
ATOM	13004	CG	LYS	Y	194	4.929	-42.869	26.397	1.00	52.34
ATOM	13005	CD	LYS	Y	194	3.815	-43.411	27.259	1.00	57.24
ATOM	13006	CE	LYS	Y	194	3.938	-42.929	28.721	1.00	63.37
ATOM	13007	NZ	LYS	Y	194	3.109	-41.715	29.044	1.00	60.63
ATOM	13008	N	VAL	Y	195	7.925	-41.681	25.741	1.00	39.11
ATOM	13009	CA	VAL	Y	195	8.976	-42.427	25.068	1.00	36.48
ATOM	13010	C	VAL	Y	195	10.298	-41.692	24.851	1.00	36.65
ATOM	13011	O	VAL	Y	195	10.360	-40.607	24.275	1.00	34.63
ATOM	13012	CB	VAL	Y	195	8.489	-42.963	23.726	1.00	32.32
ATOM	13013	CG1	VAL	Y	195	7.017	-42.846	23.659	1.00	28.77
ATOM	13014	CG2	VAL	Y	195	9.123	-42.196	22.588	1.00	36.10
ATOM	13015	N	TYR	Y	196	11.354	-42.321	25.351	1.00	37.57
ATOM	13016	CA	TYR	Y	196	12.705	-41.833	25.239	1.00	36.79
ATOM	13017	C	TYR	Y	196	13.402	-42.782	24.254	1.00	36.45
ATOM	13018	O	TYR	Y	196	13.311	-44.018	24.389	1.00	33.57

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ATOM	13019	CB	TYR	Y	196	13.362	-41.871	26.623	1.00	35.85
ATOM	13020	CG	TYR	Y	196	12.790	-40.822	27.528	1.00	38.55
ATOM	13021	CD1	TYR	Y	196	13.358	-39.552	27.596	1.00	43.72
ATOM	13022	CD2	TYR	Y	196	11.653	-41.072	28.275	1.00	38.26
ATOM	13023	CE1	TYR	Y	196	12.803	-38.544	28.391	1.00	46.23
ATOM	13024	CE2	TYR	Y	196	11.092	-40.081	29.067	1.00	42.14
ATOM	13025	CZ	TYR	Y	196	11.677	-38.813	29.122	1.00	45.17
ATOM	13026	OH	TYR	Y	196	11.169	-37.818	29.929	1.00	47.16
ATOM	13027	N	ALA	Y	197	14.103	-42.213	23.269	1.00	35.87
ATOM	13028	CA	ALA	Y	197	14.800	-43.045	22.292	1.00	33.61
ATOM	13029	C	ALA	Y	197	16.117	-42.476	21.748	1.00	34.16
ATOM	13030	O	ALA	Y	197	16.165	-41.326	21.266	1.00	31.93
ATOM	13031	CB	ALA	Y	197	13.884	-43.367	21.134	1.00	27.65
ATOM	13032	N	CYS	Y	198	17.181	-43.294	21.839	1.00	30.38
ATOM	13033	CA	CYS	Y	198	18.485	-42.940	21.276	1.00	25.41
ATOM	13034	C	CYS	Y	198	18.545	-43.700	19.925	1.00	23.04
ATOM	13035	O	CYS	Y	198	18.304	-44.901	19.846	1.00	18.05
ATOM	13036	CB	CYS	Y	198	19.648	-43.339	22.205	1.00	22.91
ATOM	13037	SG	CYS	Y	198	20.312	-44.982	21.867	1.00	23.09
ATOM	13038	N	GLU	Y	199	18.799	-42.956	18.858	1.00	25.75
ATOM	13039	CA	GLU	Y	199	18.881	-43.488	17.501	1.00	26.51
ATOM	13040	C	GLU	Y	199	20.340	-43.359	16.988	1.00	22.04
ATOM	13041	O	GLU	Y	199	20.875	-42.251	16.883	1.00	19.00
ATOM	13042	CB	GLU	Y	199	17.909	-42.688	16.612	1.00	33.32
ATOM	13043	CG	GLU	Y	199	17.857	-43.075	15.131	1.00	44.37
ATOM	13044	CD	GLU	Y	199	17.378	-41.917	14.229	1.00	53.46
ATOM	13045	OE1	GLU	Y	199	17.501	-40.740	14.653	1.00	57.39
ATOM	13046	OE2	GLU	Y	199	16.881	-42.181	13.098	1.00	54.87
ATOM	13047	N	VAL	Y	200	20.961	-44.492	16.659	1.00	17.52
ATOM	13048	CA	VAL	Y	200	22.337	-44.510	16.159	1.00	14.06
ATOM	13049	C	VAL	Y	200	22.517	-44.850	14.668	1.00	9.75
ATOM	13050	O	VAL	Y	200	21.916	-45.769	14.133	1.00	4.14
ATOM	13051	CB	VAL	Y	200	23.231	-45.487	16.974	1.00	16.94
ATOM	13052	CG1	VAL	Y	200	22.394	-46.502	17.723	1.00	17.73
ATOM	13053	CG2	VAL	Y	200	24.179	-46.188	16.053	1.00	14.60
ATOM	13054	N	THR	Y	201	23.393	-44.103	14.014	1.00	13.69
ATOM	13055	CA	THR	Y	201	23.712	-44.304	12.600	1.00	14.36
ATOM	13056	C	THR	Y	201	25.163	-44.729	12.546	1.00	8.97
ATOM	13057	O	THR	Y	201	25.992	-44.169	13.257	1.00	2.21
ATOM	13058	CB	THR	Y	201	23.585	-43.024	11.841	1.00	18.04
ATOM	13059	OG1	THR	Y	201	22.988	-42.049	12.710	1.00	28.23
ATOM	13060	CG2	THR	Y	201	22.725	-43.239	10.581	1.00	23.84
ATOM	13061	N	HIS	Y	202	25.467	-45.724	11.720	1.00	8.28
ATOM	13062	CA	HIS	Y	202	26.831	-46.219	11.611	1.00	13.21
ATOM	13063	C	HIS	Y	202	27.054	-47.251	10.484	1.00	12.30
ATOM	13064	O	HIS	Y	202	26.304	-48.202	10.299	1.00	15.12
ATOM	13065	CB	HIS	Y	202	27.285	-46.765	12.976	1.00	10.32
ATOM	13066	CG	HIS	Y	202	28.627	-47.437	12.957	1.00	20.20
ATOM	13067	ND1	HIS	Y	202	28.923	-48.488	12.108	1.00	18.03
ATOM	13068	CD2	HIS	Y	202	29.717	-47.276	13.747	1.00	19.90
ATOM	13069	CE1	HIS	Y	202	30.133	-48.949	12.383	1.00	20.52
ATOM	13070	NE2	HIS	Y	202	30.634	-48.226	13.370	1.00	24.29
ATOM	13071	N	GLN	Y	203	28.110	-47.027	9.723	1.00	12.46
ATOM	13072	CA	GLN	Y	203	28.484	-47.877	8.611	1.00	10.38
ATOM	13073	C	GLN	Y	203	28.070	-49.348	8.735	1.00	9.49
ATOM	13074	O	GLN	Y	203	27.549	-49.934	7.786	1.00	10.67
ATOM	13075	CB	GLN	Y	203	29.991	-47.775	8.449	1.00	12.56
ATOM	13076	CG	GLN	Y	203	30.513	-48.026	7.064	1.00	18.88
ATOM	13077	CD	GLN	Y	203	32.009	-48.059	7.077	1.00	21.97
ATOM	13078	OE1	GLN	Y	203	32.633	-49.089	6.753	1.00	30.04



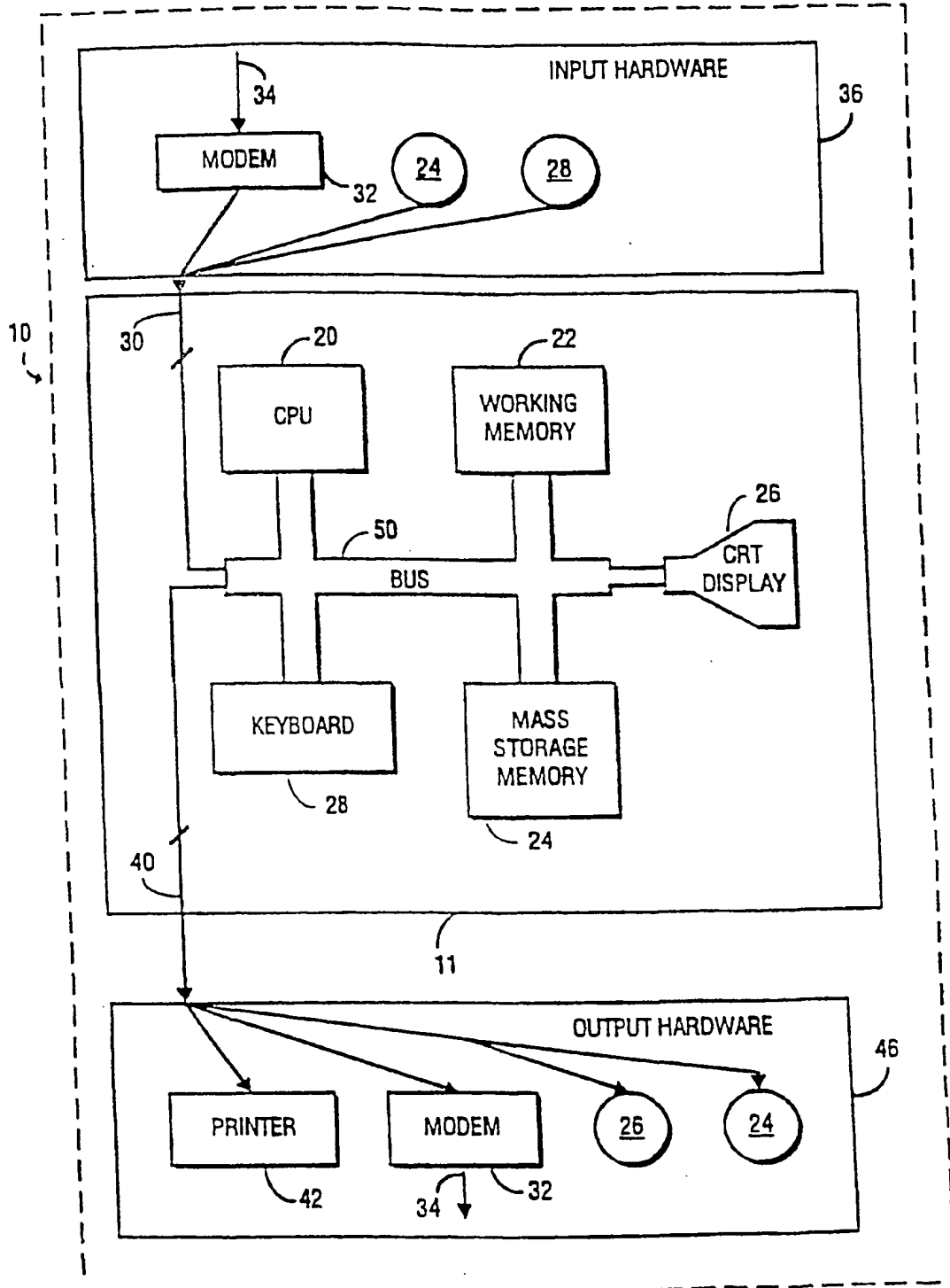
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ATOM	13079	NE2	GLN	Y	203	32.608	-46.940	7.494	1.00	11.32
ATOM	13080	N	GLY	Y	204	28.346	-49.948	9.884	1.00	6.42
ATOM	13081	CA	GLY	Y	204	28.002	-51.343	10.105	1.00	8.82
ATOM	13082	C	GLY	Y	204	26.544	-51.561	9.838	1.00	8.21
ATOM	13083	O	GLY	Y	204	26.179	-52.323	8.972	1.00	17.24
ATOM	13084	N	LEU	Y	205	25.722	-50.874	10.608	1.00	10.57
ATOM	13085	CA	LEU	Y	205	24.274	-50.900	10.512	1.00	7.13
ATOM	13086	C	LEU	Y	205	23.782	-50.682	9.087	1.00	6.60
ATOM	13087	O	LEU	Y	205	24.046	-49.660	8.461	1.00	5.43
ATOM	13088	CB	LEU	Y	205	23.722	-49.795	11.414	1.00	2.91
ATOM	13089	CG	LEU	Y	205	23.553	-50.205	12.877	1.00	9.15
ATOM	13090	CD1	LEU	Y	205	24.691	-51.024	13.348	1.00	2.74
ATOM	13091	CD2	LEU	Y	205	23.439	-48.982	13.737	1.00	11.84
ATOM	13092	N	SER	Y	206	23.047	-51.635	8.558	1.00	3.98
ATOM	13093	CA	SER	Y	206	22.552	-51.413	7.239	1.00	6.19
ATOM	13094	C	SER	Y	206	21.707	-50.163	7.287	1.00	9.57
ATOM	13095	O	SER	Y	206	21.438	-49.573	6.269	1.00	12.99
ATOM	13096	CB	SER	Y	206	21.682	-52.575	6.802	1.00	13.50
ATOM	13097	OG	SER	Y	206	20.742	-52.148	5.823	1.00	19.49
ATOM	13098	N	SER	Y	207	21.252	-49.770	8.471	1.00	18.05
ATOM	13099	CA	SER	Y	207	20.395	-48.591	8.589	1.00	19.72
ATOM	13100	C	SER	Y	207	20.227	-48.219	10.040	1.00	19.22
ATOM	13101	O	SER	Y	207	20.389	-49.072	10.908	1.00	24.05
ATOM	13102	CB	SER	Y	207	19.032	-48.895	7.993	1.00	24.51
ATOM	13103	OG	SER	Y	207	19.022	-50.207	7.442	1.00	32.25
ATOM	13104	N	PRO	Y	208	19.848	-46.955	10.325	1.00	18.21
ATOM	13105	CA	PRO	Y	208	19.660	-46.441	11.695	1.00	12.89
ATOM	13106	C	PRO	Y	208	18.821	-47.282	12.616	1.00	10.05
ATOM	13107	O	PRO	Y	208	17.630	-47.466	12.438	1.00	13.57
ATOM	13108	CB	PRO	Y	208	19.115	-45.029	11.501	1.00	9.34
ATOM	13109	CG	PRO	Y	208	19.617	-44.619	10.190	1.00	13.06
ATOM	13110	CD	PRO	Y	208	19.577	-45.910	9.328	1.00	18.82
ATOM	13111	N	VAL	Y	209	19.513	-47.842	13.582	1.00	7.00
ATOM	13112	CA	VAL	Y	209	18.943	-48.678	14.597	1.00	9.23
ATOM	13113	C	VAL	Y	209	18.453	-47.735	15.661	1.00	14.17
ATOM	13114	O	VAL	Y	209	19.219	-46.917	16.148	1.00	13.01
ATOM	13115	CB	VAL	Y	209	20.050	-49.576	15.182	1.00	10.59
ATOM	13116	CG1	VAL	Y	209	19.662	-50.106	16.577	1.00	3.68
ATOM	13117	CG2	VAL	Y	209	20.370	-50.697	14.183	1.00	6.58
ATOM	13118	N	THR	Y	210	17.173	-47.814	16.008	1.00	20.90
ATOM	13119	CA	THR	Y	210	16.647	-46.952	17.065	1.00	23.22
ATOM	13120	C	THR	Y	210	16.413	-47.840	18.259	1.00	24.06
ATOM	13121	O	THR	Y	210	16.108	-49.010	18.105	1.00	27.90
ATOM	13122	CB	THR	Y	210	15.300	-46.311	16.703	1.00	23.43
ATOM	13123	OG1	THR	Y	210	15.463	-45.397	15.616	1.00	28.76
ATOM	13124	CG2	THR	Y	210	14.770	-45.552	17.866	1.00	19.16
ATOM	13125	N	LYS	Y	211	16.590	-47.304	19.448	1.00	26.78
ATOM	13126	CA	LYS	Y	211	16.346	-48.094	20.640	1.00	32.83
ATOM	13127	C	LYS	Y	211	15.586	-47.200	21.615	1.00	36.63
ATOM	13128	O	LYS	Y	211	16.131	-46.217	22.158	1.00	36.15
ATOM	13129	CB	LYS	Y	211	17.654	-48.588	21.251	1.00	34.69
ATOM	13130	CG	LYS	Y	211	17.541	-49.919	22.022	1.00	36.53
ATOM	13131	CD	LYS	Y	211	17.686	-51.139	21.099	1.00	33.46
ATOM	13132	CE	LYS	Y	211	18.121	-52.403	21.861	1.00	36.99
ATOM	13133	NZ	LYS	Y	211	17.087	-53.016	22.777	1.00	36.92
ATOM	13134	N	SER	Y	212	14.319	-47.556	21.835	1.00	37.98
ATOM	13135	CA	SER	Y	212	13.450	-46.769	22.697	1.00	34.69
ATOM	13136	C	SER	Y	212	12.820	-47.570	23.783	1.00	32.49
ATOM	13137	O	SER	Y	212	12.880	-48.791	23.787	1.00	31.78
ATOM	13138	CB	SER	Y	212	12.330	-46.181	21.878	1.00	34.36

ATOM	13139	OG	SER Y 212	11.900	-47.165	20.965	1.00	35.94
ATOM	13140	N	PHE Y 213	12.185	-46.849	24.693	1.00	35.85
ATOM	13141	CA	PHE Y 213	11.461	-47.449	25.799	1.00	39.25
ATOM	13142	C	PHE Y 213	10.491	-46.396	26.295	1.00	42.41
ATOM	13143	O	PHE Y 213	10.644	-45.221	25.978	1.00	42.44
ATOM	13144	CB	PHE Y 213	12.407	-47.875	26.916	1.00	36.84
ATOM	13145	CG	PHE Y 213	12.859	-46.753	27.782	1.00	38.88
ATOM	13146	CD1	PHE Y 213	14.065	-46.133	27.554	1.00	43.16
ATOM	13147	CD2	PHE Y 213	12.073	-46.302	28.823	1.00	40.65
ATOM	13148	CE1	PHE Y 213	14.482	-45.073	28.361	1.00	45.16
ATOM	13149	CE2	PHE Y 213	12.483	-45.240	29.629	1.00	41.62
ATOM	13150	CZ	PHE Y 213	13.686	-44.628	29.396	1.00	43.73
ATOM	13151	N	ASN Y 214	9.481	-46.819	27.047	1.00	47.88
ATOM	13152	CA	ASN Y 214	8.502	-45.887	27.599	1.00	50.10
ATOM	13153	C	ASN Y 214	8.520	-46.014	29.112	1.00	49.66
ATOM	13154	O	ASN Y 214	8.677	-47.116	29.644	1.00	48.79
ATOM	13155	CB	ASN Y 214	7.124	-46.218	27.058	1.00	56.26
ATOM	13156	CG	ASN Y 214	7.076	-46.151	25.550	1.00	65.31
ATOM	13157	OD1	ASN Y 214	7.838	-46.836	24.849	1.00	68.52
ATOM	13158	ND2	ASN Y 214	6.185	-45.314	25.032	1.00	69.96
ATOM	13159	N	ARG Y 215	8.384	-44.892	29.808	1.00	50.44
ATOM	13160	CA	ARG Y 215	8.392	-44.926	31.266	1.00	55.35
ATOM	13161	C	ARG Y 215	7.374	-45.941	31.795	1.00	58.16
ATOM	13162	O	ARG Y 215	6.302	-46.091	31.151	1.00	60.08
ATOM	13163	CB	ARG Y 215	8.078	-43.551	31.840	1.00	53.17
ATOM	13164	CG	ARG Y 215	8.477	-42.423	30.961	1.00	58.19
ATOM	13165	CD	ARG Y 215	8.658	-41.171	31.780	1.00	63.07
ATOM	13166	NE	ARG Y 215	7.381	-40.641	32.226	1.00	71.10
ATOM	13167	CZ	ARG Y 215	6.832	-40.947	33.392	1.00	76.24
ATOM	13168	NH1	ARG Y 215	7.461	-41.778	34.217	1.00	76.27
ATOM	13169	NH2	ARG Y 215	5.647	-40.447	33.720	1.00	80.05
ATOM	13170	OT	ARG Y 215	7.662	-46.577	32.840	1.00	58.63
ATOM	13171	ZN	MZN Z 498	48.012	23.129	20.838	1.00	39.88
ATOM	13172	ZN	MZN Z 499	107.628	11.629	20.843	1.00	38.30
ATOM	13173	ZN	MZN Z 500	68.309	-34.600	20.840	1.00	38.46
END								

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Figure 5



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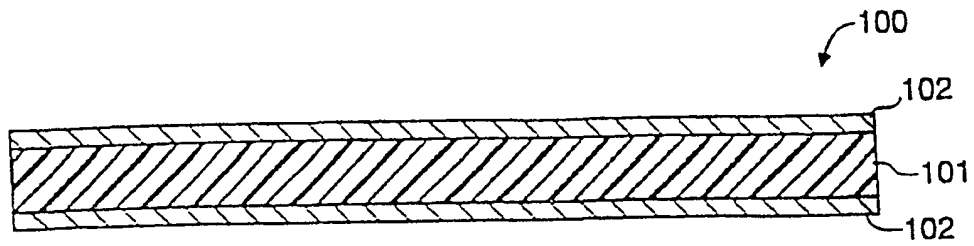


Figure 6

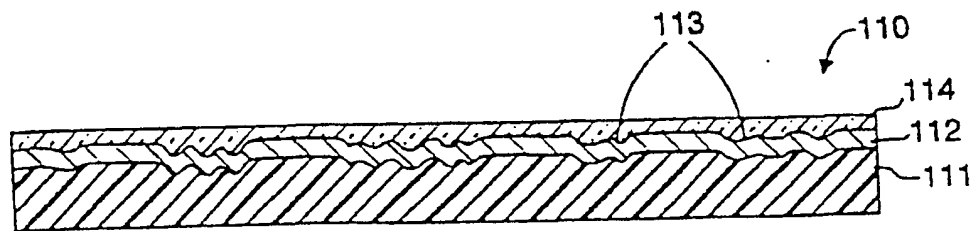


Figure 7

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## CD154 amino acid sequence

MIETYNQTSPPSAATGLPISMKIFMYLLTVFLITQMIGSALFAVYLHRRLDKIEDERNLH  
EDFVFMKTIQRCNTGERSLSLLNCEEIKSQFEGFVKDIMLNKEETKKENS FEMQK [  
GDQNPQIAAHVISEASSKTTSVLQWAEKGYTMSNNLVTLENGKQLTVKRQGLYYIYAQVTFCSN  
REASSQAPFIASLCLKSPGRFERILLRAANTHSSAKPCGQOSIHLGGVFELQPGASVFN  
VTDPSQVSHGTGFTSFGLLKL ]

## hu5c8 heavy chain amino acid sequence

[ QVQLVQSGAE VVKPGASVKL SCKASGYIFT SYMYWVKQA PGQGLEWIGE  
INPSNGDTNF NEKF~~SK~~ATL TVDKSASTAY MELSSLRSED TAVYYCTRSD GRNDMDSWGQ  
GTLTVSSAS TKGPSVFPLA PSSKSTSGGT AALGCLVKDY FPEPVTVSWN SGALTSGVHT  
FPAVLQSSGL YSLSSVVTVP SSSLGTQTYI CNVNHKPSNT KVDKKVEPK ]  
S CDKTHTCPPC PAPELLGGPS VFLFPPKPKD TLMISRTPEV TCVVVDVSHE  
DPEVKFNWYV DGVEVHNAKT KPREEQYNST YRVVSVLTVL HQDWLNGKEY KCKVSNKALP  
APIEKTISKA KGQPREPQVY TLPPSRDELT KNQVSLTCLV KGFYPSDIAV EWESNGQOPEN  
NYKTTTPPVL SDGSFFLYSK LTVDKSRWQQ GNVFSCSVMH EALHNHYTQK SLSLSPGK

## hu5c8 light chain amino acid sequence

[ DIVLTQSPAT LSVSPGERAT ISCRASQRVS SSTYSYMHWY QOKPGQPPKL  
LIKYASNLES GVPARFSGSG SGTDFTLTIS SVEPEDFATY YCQHSWEIPP TFGGGTKLEI  
KRTVAAPSVF IFPPSDEQLK SGTASVCLL NNFYPREAKV QWKVDNALQS GNSQESVTEQ  
DSKDSTYSL S~~T~~LTLSKADY EKHKVYACEV THQGLSSPVT KSFNR ]GEC

Figure 8

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Figure 9

REMARK  $r = 0.283571$   $free\_r = 0.368927$ 

ATOM	1	CB	ASP	1	67.265	-16.871	24.434	1.00	35.97	L
ATOM	2	CG	ASP	1	67.001	-16.736	22.939	1.00	35.97	L
ATOM	3	OD1	ASP	1	67.966	-16.903	22.162	1.00	35.97	L
ATOM	4	OD2	ASP	1	65.836	-16.467	22.544	1.00	35.97	L
ATOM	5	C	ASP	1	68.828	-16.530	26.333	1.00	21.62	L
ATOM	6	O	ASP	1	69.123	-17.548	26.999	1.00	35.97	L
ATOM	7	HT1	ASP	1	70.366	-17.799	24.965	1.00	0.00	L
ATOM	8	HT2	ASP	1	70.208	-17.109	23.434	1.00	0.00	L
ATOM	9	N	ASP	1	69.686	-17.527	24.225	1.00	21.62	L
ATOM	10	HT3	ASP	1	69.178	-18.374	23.901	1.00	0.00	L
ATOM	11	CA	ASP	1	68.719	-16.544	24.815	1.00	21.62	L
ATOM	12	N	ILE	2	68.640	-15.337	26.872	1.00	34.35	L
ATOM	13	H	ILE	2	68.470	-14.571	26.287	1.00	0.00	L
ATOM	14	CA	ILE	2	68.688	-15.147	28.303	1.00	34.35	L
ATOM	15	CB	ILE	2	69.432	-13.859	28.674	1.00	2.00	L
ATOM	16	CG2	ILE	2	69.802	-13.898	30.131	1.00	2.00	L
ATOM	17	CG1	ILE	2	70.650	-13.712	27.786	1.00	2.00	L
ATOM	18	CD1	ILE	2	71.909	-14.034	28.432	1.00	2.00	L
ATOM	19	C	ILE	2	67.228	-15.073	28.668	1.00	34.35	L
ATOM	20	O	ILE	2	66.382	-14.565	27.938	1.00	2.00	L
ATOM	21	N	VAL	3	66.902	-15.565	29.822	1.00	11.28	L
ATOM	22	H	VAL	3	67.580	-15.866	30.438	1.00	0.00	L
ATOM	23	CA	VAL	3	65.497	-15.577	30.119	1.00	11.28	L
ATOM	24	CB	VAL	3	65.043	-17.007	30.550	1.00	25.11	L
ATOM	25	CG1	VAL	3	63.919	-16.926	31.576	1.00	25.11	L
ATOM	26	CG2	VAL	3	64.589	-17.800	29.322	1.00	25.11	L
ATOM	27	C	VAL	3	65.225	-14.549	31.179	1.00	11.28	L
ATOM	28	O	VAL	3	65.790	-14.624	32.248	1.00	25.11	L
ATOM	29	N	LEU	4	64.390	-13.561	30.855	1.00	39.95	L
ATOM	30	H	LEU	4	64.008	-13.549	29.942	1.00	0.00	L
ATOM	31	CA	LEU	4	64.034	-12.505	31.801	1.00	39.95	L
ATOM	32	CB	LEU	4	63.942	-11.131	31.106	1.00	19.20	L
ATOM	33	CG	LEU	4	65.228	-10.695	30.397	1.00	19.20	L
ATOM	34	CD1	LEU	4	65.282	-9.202	30.137	1.00	19.20	L
ATOM	35	CD2	LEU	4	66.388	-11.137	31.243	1.00	19.20	L
ATOM	36	C	LEU	4	62.702	-12.858	32.410	1.00	39.95	L
ATOM	37	O	LEU	4	61.695	-12.968	31.710	1.00	19.20	L
ATOM	38	N	THR	5	62.703	-13.043	33.721	1.00	24.01	L
ATOM	39	H	THR	5	63.524	-12.936	34.203	1.00	0.00	L
ATOM	40	CA	THR	5	61.473	-13.380	34.419	1.00	24.01	L
ATOM	41	CB	THR	5	61.696	-14.565	35.355	1.00	27.92	L
ATOM	42	OG1	THR	5	61.648	-15.788	34.603	1.00	27.92	L
ATOM	43	HG1	THR	5	61.380	-16.484	35.207	1.00	0.00	L
ATOM	44	CG2	THR	5	60.621	-14.590	36.437	1.00	27.92	L
ATOM	45	C	THR	5	60.933	-12.213	35.243	1.00	24.01	L
ATOM	46	O	THR	5	61.601	-11.786	36.150	1.00	27.92	L
ATOM	47	N	GLN	6	59.743	-11.702	34.913	1.00	28.69	L
ATOM	48	H	GLN	6	59.255	-12.074	34.138	1.00	0.00	L
ATOM	49	CA	GLN	6	59.156	-10.582	35.677	1.00	28.69	L
ATOM	50	CB	GLN	6	58.355	-9.612	34.765	1.00	37.21	L
ATOM	51	CG	GLN	6	59.197	-8.850	33.763	1.00	37.21	L
ATOM	52	CD	GLN	6	58.617	-7.500	33.326	1.00	37.21	L
ATOM	53	OE1	GLN	6	59.275	-6.729	32.602	1.00	37.21	L

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ATOM	54	NE2 GLN	6	57.398	-7.199	33.758	1.00	37.21	L
ATOM	55	HE21 GLN	6	57.164	-6.264	33.902	1.00	0.00	L
ATOM	56	HE22 GLN	6	56.786	-7.946	33.911	1.00	0.00	L
ATOM	57	C GLN	6	58.234	-11.121	36.797	1.00	28.69	L
ATOM	58	O GLN	6	57.846	-12.295	36.835	1.00	37.21	L
ATOM	59	N SER	7	57.891	-10.252	37.719	1.00	16.22	L
ATOM	60	H SER	7	58.226	-9.329	37.650	1.00	0.00	L
ATOM	61	CA SER	7	57.037	-10.625	38.812	1.00	16.22	L
ATOM	62	CB SER	7	57.696	-11.691	39.646	1.00	23.67	L
ATOM	63	OG SER	7	57.787	-11.249	40.988	1.00	23.67	L
ATOM	64	HG SER	7	57.836	-12.011	41.566	1.00	0.00	L
ATOM	65	C SER	7	56.856	-9.372	39.652	1.00	16.22	L
ATOM	66	O SER	7	57.795	-8.613	39.847	1.00	23.67	L
ATOM	67	N PRO	8	55.641	-9.146	40.156	1.00	19.93	L
ATOM	68	CD PRO	8	55.245	-7.927	40.883	1.00	13.44	L
ATOM	69	CA PRO	8	54.493	-10.028	39.959	1.00	19.93	L
ATOM	70	CB PRO	8	53.527	-9.537	41.038	1.00	13.44	L
ATOM	71	CG PRO	8	53.729	-8.055	41.007	1.00	13.44	L
ATOM	72	C PRO	8	53.957	-9.774	38.552	1.00	19.93	L
ATOM	73	O PRO	8	54.459	-8.869	37.883	1.00	13.44	L
ATOM	74	N ALA	9	52.949	-10.549	38.127	1.00	19.87	L
ATOM	75	H ALA	9	52.617	-11.261	38.713	1.00	0.00	L
ATOM	76	CA ALA	9	52.318	-10.377	36.806	1.00	19.87	L
ATOM	77	CB ALA	9	51.523	-11.576	36.460	1.00	16.49	L
ATOM	78	C ALA	9	51.411	-9.139	36.825	1.00	19.87	L
ATOM	79	O ALA	9	51.741	-8.110	36.242	1.00	16.49	L
ATOM	80	N THR	10	50.256	-9.228	37.463	0.00	21.97	L
ATOM	81	H THR	10	49.962	-10.068	37.883	1.00	0.00	L
ATOM	82	CA THR	10	49.417	-8.048	37.543	0.00	21.97	L
ATOM	83	CB THR	10	47.940	-8.379	37.441	0.00	27.89	L
ATOM	84	OG1 THR	10	47.400	-8.549	38.760	0.00	27.89	L
ATOM	85	HG1 THR	10	46.598	-8.036	38.876	1.00	0.00	L
ATOM	86	CG2 THR	10	47.745	-9.654	36.634	0.00	27.89	L
ATOM	87	C THR	10	49.701	-7.623	38.952	1.00	21.97	L
ATOM	88	O THR	10	49.977	-8.484	39.783	1.00	27.89	L
ATOM	89	N LEU	11	49.685	-6.314	39.215	1.00	43.77	L
ATOM	90	H LEU	11	49.510	-5.682	38.489	1.00	0.00	L
ATOM	91	CA LEU	11	49.917	-5.756	40.554	1.00	43.77	L
ATOM	92	CB LEU	11	51.370	-5.322	40.716	1.00	11.38	L
ATOM	93	CG LEU	11	52.086	-4.012	40.336	1.00	11.38	L
ATOM	94	CD1 LEU	11	51.166	-2.973	39.863	1.00	11.38	L
ATOM	95	CD2 LEU	11	52.877	-3.513	41.565	1.00	11.38	L
ATOM	96	C LEU	11	48.965	-4.585	40.798	1.00	43.77	L
ATOM	97	O LEU	11	48.959	-3.629	40.027	1.00	11.38	L
ATOM	98	N SER	12	48.161	-4.655	41.868	1.00	16.84	L
ATOM	99	H SER	12	48.245	-5.424	42.477	1.00	0.00	L
ATOM	100	CA SER	12	47.173	-3.609	42.151	1.00	16.84	L
ATOM	101	CB SER	12	45.866	-4.216	42.654	1.00	37.94	L
ATOM	102	OG SER	12	44.765	-3.369	42.355	1.00	37.94	L
ATOM	103	HG SER	12	44.697	-3.269	41.397	1.00	0.00	L
ATOM	104	C SER	12	47.610	-2.580	43.139	1.00	16.84	L
ATOM	105	O SER	12	47.965	-2.902	44.240	1.00	37.94	L
ATOM	106	N ALA	13	47.522	-1.330	42.741	1.00	9.81	L
ATOM	107	H ALA	13	47.175	-1.143	41.843	1.00	0.00	L
ATOM	108	CA ALA	13	47.918	-0.223	43.574	1.00	9.81	L
ATOM	109	CB ALA	13	49.423	0.100	43.287	1.00	15.19	L

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ATOM	110	C	ALA	13	47.026	1.021	43.308	1.00	9.81	L
ATOM	111	O	ALA	13	46.655	1.305	42.179	1.00	15.19	L
ATOM	112	N	SER	14	46.688	1.782	44.329	1.00	27.70	L
ATOM	113	H	SER	14	46.977	1.562	45.233	1.00	0.00	L
ATOM	114	CA	SER	14	45.883	2.989	44.076	1.00	27.70	L
ATOM	115	CB	SER	14	44.920	3.254	45.221	1.00	28.80	L
ATOM	116	OG	SER	14	45.639	3.324	46.440	1.00	28.80	L
ATOM	117	HG	SER	14	45.193	3.946	47.016	1.00	0.00	L
ATOM	118	C	SER	14	46.895	4.117	44.007	1.00	27.70	L
ATOM	119	O	SER	14	48.050	3.949	44.436	1.00	28.80	L
ATOM	120	N	PRO	15	46.493	5.285	43.495	1.00	21.62	L
ATOM	121	CD	PRO	15	45.188	5.732	43.026	1.00	11.41	L
ATOM	122	CA	PRO	15	47.476	6.370	43.420	1.00	21.62	L
ATOM	123	CB	PRO	15	46.659	7.571	42.931	1.00	11.41	L
ATOM	124	CG	PRO	15	45.546	7.015	42.274	1.00	11.41	L
ATOM	125	C	PRO	15	48.132	6.650	44.768	1.00	21.62	L
ATOM	126	O	PRO	15	47.615	6.255	45.849	1.00	11.41	L
ATOM	127	N	GLY	16	49.265	7.339	44.702	1.00	24.66	L
ATOM	128	H	GLY	16	49.604	7.599	43.821	1.00	0.00	L
ATOM	129	CA	GLY	16	49.989	7.696	45.907	1.00	24.66	L
ATOM	130	C	GLY	16	50.811	6.544	46.405	1.00	24.66	L
ATOM	131	O	GLY	16	51.962	6.743	46.742	1.00	48.13	L
ATOM	132	N	GLU	17	50.257	5.342	46.423	0.00	20.00	L
ATOM	133	H	GLU	17	49.337	5.214	46.111	1.00	0.00	L
ATOM	134	CA	GLU	17	51.020	4.203	46.900	0.00	20.00	L
ATOM	135	CB	GLU	17	50.258	2.900	46.635	0.00	20.00	L
ATOM	136	CG	GLU	17	49.372	2.444	47.786	0.00	20.00	L
ATOM	137	CD	GLU	17	47.999	3.105	47.762	0.00	20.00	L
ATOM	138	OE1	GLU	17	47.027	2.498	48.279	0.00	20.00	L
ATOM	139	OE2	GLU	17	47.896	4.232	47.223	0.00	20.00	L
ATOM	140	C	GLU	17	52.375	4.138	46.209	0.00	20.00	L
ATOM	141	O	GLU	17	52.683	4.923	45.308	0.00	20.00	L
ATOM	142	N	ARG	18	53.190	3.199	46.659	0.00	20.00	L
ATOM	143	H	ARG	18	52.905	2.642	47.412	1.00	0.00	L
ATOM	144	CA	ARG	18	54.486	2.986	46.056	0.00	20.00	L
ATOM	145	CB	ARG	18	55.522	2.595	47.110	0.00	20.00	L
ATOM	146	CG	ARG	18	56.956	2.602	46.597	0.00	20.00	L
ATOM	147	CD	ARG	18	57.826	3.568	47.402	0.00	20.00	L
ATOM	148	NE	ARG	18	59.195	3.082	47.582	0.00	20.00	L
ATOM	149	HE	ARG	18	59.307	2.153	47.880	1.00	0.00	L
ATOM	150	CZ	ARG	18	60.283	3.819	47.370	0.00	20.00	L
ATOM	151	NH1	ARG	18	60.165	5.079	46.972	0.00	20.00	L
ATOM	152	HH11	ARG	18	60.955	5.580	46.616	1.00	0.00	L
ATOM	153	HH12	ARG	18	59.297	5.562	47.111	1.00	0.00	L
ATOM	154	NH2	ARG	18	61.490	3.302	47.553	0.00	20.00	L
ATOM	155	HH21	ARG	18	61.676	2.350	47.306	1.00	0.00	L
ATOM	156	HH22	ARG	18	62.090	3.769	48.205	1.00	0.00	L
ATOM	157	C	ARG	18	54.235	1.819	45.119	0.00	20.00	L
ATOM	158	O	ARG	18	53.269	1.078	45.279	0.00	20.00	L
ATOM	159	N	ALA	19	55.091	1.661	44.130	1.00	36.57	L
ATOM	160	H	ALA	19	55.835	2.278	44.023	1.00	0.00	L
ATOM	161	CA	ALA	19	54.938	0.562	43.200	1.00	36.57	L
ATOM	162	CB	ALA	19	54.232	1.012	41.948	1.00	26.11	L
ATOM	163	C	ALA	19	56.315	0.077	42.860	1.00	36.57	L
ATOM	164	O	ALA	19	57.195	0.839	42.448	1.00	26.11	L
ATOM	165	N	THR	20	56.523	-1.200	43.071	1.00	27.09	L



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ATOM	166	H	THR	20	55.827	-1.770	43.444	1.00	0.00	L
ATOM	167	CA	THR	20	57.801	-1.772	42.736	1.00	27.09	L
ATOM	168	CB	THR	20	58.748	-1.830	43.956	1.00	17.74	L
ATOM	169	OG1	THR	20	58.604	-3.080	44.627	1.00	17.74	L
ATOM	170	HG1	THR	20	59.103	-3.063	45.440	1.00	0.00	L
ATOM	171	CG2	THR	20	58.410	-0.754	44.908	1.00	17.74	L
ATOM	172	C	THR	20	57.555	-3.156	42.157	1.00	27.09	L
ATOM	173	O	THR	20	56.875	-4.013	42.766	1.00	17.74	L
ATOM	174	N	ILE	21	58.074	-3.307	40.935	1.00	35.27	L
ATOM	175	H	ILE	21	58.532	-2.538	40.538	1.00	0.00	L
ATOM	176	CA	ILE	21	58.026	-4.531	40.126	1.00	35.27	L
ATOM	177	CB	ILE	21	57.532	-4.248	38.699	1.00	22.35	L
ATOM	178	CG2	ILE	21	57.623	-5.515	37.846	1.00	22.35	L
ATOM	179	CG1	ILE	21	56.103	-3.732	38.734	1.00	22.35	L
ATOM	180	CD1	ILE	21	55.848	-2.625	37.732	1.00	22.35	L
ATOM	181	C	ILE	21	59.466	-5.037	40.025	1.00	35.27	L
ATOM	182	O	ILE	21	60.430	-4.272	40.097	1.00	22.35	L
ATOM	183	N	SER	22	59.624	-6.328	39.851	1.00	19.19	L
ATOM	184	H	SER	22	58.846	-6.927	39.775	1.00	0.00	L
ATOM	185	CA	SER	22	60.968	-6.857	39.774	1.00	19.19	L
ATOM	186	CB	SER	22	61.295	-7.576	41.076	1.00	19.79	L
ATOM	187	OG	SER	22	60.510	-8.735	41.203	1.00	19.79	L
ATOM	188	HG	SER	22	59.603	-8.533	40.959	1.00	0.00	L
ATOM	189	C	SER	22	61.251	-7.768	38.572	1.00	19.19	L
ATOM	190	O	SER	22	60.415	-8.565	38.155	1.00	19.79	L
ATOM	191	N	CYS	23	62.446	-7.623	38.022	1.00	17.40	L
ATOM	192	H	CYS	23	63.077	-6.978	38.391	1.00	0.00	L
ATOM	193	CA	CYS	23	62.855	-8.391	36.859	1.00	17.40	L
ATOM	194	C	CYS	23	64.023	-9.275	37.223	1.00	17.40	L
ATOM	195	O	CYS	23	64.903	-8.884	37.985	1.00	35.27	L
ATOM	196	CB	CYS	23	63.246	-7.469	35.700	1.00	35.27	L
ATOM	197	SG	CYS	23	63.639	-8.469	34.249	1.00	35.27	L
ATOM	198	N	ARG	24	64.029	-10.461	36.634	1.00	43.37	L
ATOM	199	H	ARG	24	63.333	-10.669	35.973	1.00	0.00	L
ATOM	200	CA	ARG	24	65.036	-11.469	36.938	1.00	43.37	L
ATOM	201	CB	ARG	24	64.419	-12.445	37.933	1.00	43.84	L
ATOM	202	CG	ARG	24	65.140	-12.509	39.197	1.00	43.84	L
ATOM	203	CD	ARG	24	66.327	-13.377	38.979	1.00	43.84	L
ATOM	204	NE	ARG	24	67.090	-13.556	40.203	1.00	43.84	L
ATOM	205	HE	ARG	24	67.976	-13.136	40.261	1.00	0.00	L
ATOM	206	CZ	ARG	24	66.662	-14.245	41.255	1.00	43.84	L
ATOM	207	NH1	ARG	24	65.461	-14.829	41.239	1.00	43.84	L
ATOM	208	HH11	ARG	24	65.390	-15.810	41.071	1.00	0.00	L
ATOM	209	HH12	ARG	24	64.685	-14.335	41.646	1.00	0.00	L
ATOM	210	NH2	ARG	24	67.441	-14.336	42.325	1.00	43.84	L
ATOM	211	HH21	ARG	24	67.598	-15.222	42.748	1.00	0.00	L
ATOM	212	HH22	ARG	24	68.037	-13.563	42.572	1.00	0.00	L
ATOM	213	C	ARG	24	65.597	-12.243	35.734	1.00	43.37	L
ATOM	214	O	ARG	24	64.882	-13.003	35.073	1.00	43.84	L
ATOM	215	N	ALA	25	66.892	-12.055	35.484	1.00	31.15	L
ATOM	216	H	ALA	25	67.399	-11.454	36.075	1.00	0.00	L
ATOM	217	CA	ALA	25	67.609	-12.695	34.360	1.00	31.15	L
ATOM	218	CB	ALA	25	68.687	-11.730	33.772	1.00	17.85	L
ATOM	219	C	ALA	25	68.286	-13.988	34.745	1.00	31.15	L
ATOM	220	O	ALA	25	68.984	-14.040	35.742	1.00	17.85	L
ATOM	221	N	SER	26	68.088	-15.018	33.933	1.00	19.32	L

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ATOM	222	H	SER	26	67.513	-14.896	33.146	1.00	0.00	L
ATOM	223	CA	SER	26	68.698	-16.329	34.154	1.00	19.32	L
ATOM	224	CB	SER	26	68.228	-17.313	33.085	1.00	23.09	L
ATOM	225	OG	SER	26	68.325	-16.750	31.780	1.00	23.09	L
ATOM	226	HG	SER	26	69.137	-17.043	31.363	1.00	0.00	L
ATOM	227	C	SER	26	70.233	-16.249	34.103	1.00	19.32	L
ATOM	228	O	SER	26	70.916	-17.062	34.719	1.00	23.09	L
ATOM	229	N	GLN	27	70.757	-15.274	33.354	1.00	27.78	L
ATOM	230	H	GLN	27	70.146	-14.671	32.878	1.00	0.00	L
ATOM	231	CA	GLN	27	72.205	-15.074	33.212	1.00	27.78	L
ATOM	232	CB	GLN	27	72.603	-15.311	31.738	1.00	39.22	L
ATOM	233	CG	GLN	27	74.029	-14.893	31.364	1.00	39.22	L
ATOM	234	CD	GLN	27	74.487	-15.457	30.006	1.00	39.22	L
ATOM	235	OE1	GLN	27	73.846	-16.355	29.429	1.00	39.22	L
ATOM	236	NE2	GLN	27	75.601	-14.922	29.492	1.00	39.22	L
ATOM	237	HE21	GLN	27	76.076	-14.236	30.003	1.00	0.00	L
ATOM	238	HE22	GLN	27	75.890	-15.246	28.614	1.00	0.00	L
ATOM	239	C	GLN	27	72.565	-13.651	33.660	1.00	27.78	L
ATOM	240	O	GLN	27	71.690	-12.778	33.759	1.00	39.22	L
ATOM	241	N	ARG	28	73.845	-13.419	33.925	0.00	20.00	L
ATOM	242	H	ARG	28	74.480	-14.150	33.815	1.00	0.00	L
ATOM	243	CA	ARG	28	74.308	-12.109	34.368	0.00	20.00	L
ATOM	244	CB	ARG	28	75.772	-12.191	34.807	0.00	20.00	L
ATOM	245	CG	ARG	28	76.107	-11.329	36.012	0.00	20.00	L
ATOM	246	CD	ARG	28	76.802	-12.141	37.093	0.00	20.00	L
ATOM	247	NE	ARG	28	75.958	-13.221	37.595	0.00	20.00	L
ATOM	248	HE	ARG	28	75.078	-13.351	37.182	1.00	0.00	L
ATOM	249	CZ	ARG	28	76.305	-14.042	38.580	0.00	20.00	L
ATOM	250	NH1	ARG	28	77.484	-13.909	39.173	0.00	20.00	L
ATOM	251	HH11	ARG	28	77.891	-13.002	39.281	1.00	0.00	L
ATOM	252	HH12	ARG	28	77.959	-14.714	39.528	1.00	0.00	L
ATOM	253	NH2	ARG	28	75.475	-14.998	38.974	0.00	20.00	L
ATOM	254	HH21	ARG	28	75.360	-15.822	38.419	1.00	0.00	L
ATOM	255	HH22	ARG	28	74.951	-14.889	39.819	1.00	0.00	L
ATOM	256	C	ARG	28	74.163	-11.051	33.279	0.00	20.00	L
ATOM	257	O	ARG	28	74.291	-11.347	32.090	0.00	20.00	L
ATOM	258	N	VAL	29	73.895	-9.816	33.693	0.00	20.00	L
ATOM	259	H	VAL	29	73.801	-9.646	34.654	1.00	0.00	L
ATOM	260	CA	VAL	29	73.737	-8.711	32.756	0.00	20.00	L
ATOM	261	CB	VAL	29	72.250	-8.478	32.407	0.00	20.00	L
ATOM	262	CG1	VAL	29	71.724	-9.633	31.573	0.00	20.00	L
ATOM	263	CG2	VAL	29	71.435	-8.324	33.680	0.00	20.00	L
ATOM	264	C	VAL	29	74.309	-7.415	33.325	0.00	20.00	L
ATOM	265	O	VAL	29	74.712	-6.526	32.575	0.00	20.00	L
ATOM	266	N	SER	30	74.343	-7.316	34.651	0.00	20.00	L
ATOM	267	H	SER	30	74.012	-8.061	35.195	1.00	0.00	L
ATOM	268	CA	SER	30	74.862	-6.126	35.316	0.00	20.00	L
ATOM	269	CB	SER	30	76.381	-6.044	35.136	0.00	20.00	L
ATOM	270	OG	SER	30	77.013	-7.229	35.591	0.00	20.00	L
ATOM	271	HG	SER	30	77.938	-7.229	35.331	1.00	0.00	L
ATOM	272	C	SER	30	74.197	-4.878	34.740	0.00	20.00	L
ATOM	273	O	SER	30	72.986	-4.863	34.518	0.00	20.00	L
ATOM	274	N	SER	31	74.986	-3.835	34.500	0.00	20.00	L
ATOM	275	H	SER	31	75.944	-3.874	34.696	1.00	0.00	L
ATOM	276	CA	SER	31	74.458	-2.596	33.943	0.00	20.00	L
ATOM	277	CB	SER	31	75.492	-1.473	34.079	0.00	20.00	L

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ATOM	278	OG	SER	31	76.810	-1.992	34.123	0.00	20.00	L
ATOM	279	HG	SER	31	76.846	-2.836	33.668	1.00	0.00	L
ATOM	280	C	SER	31	74.098	-2.794	32.472	0.00	20.00	L
ATOM	281	O	SER	31	74.818	-2.336	31.583	0.00	20.00	L
ATOM	282	N	ALA	32	72.982	-3.480	32.224	1.00	35.60	L
ATOM	283	H	ALA	32	72.457	-3.803	32.981	1.00	0.00	L
ATOM	284	CA	ALA	32	72.523	-3.743	30.850	1.00	35.60	L
ATOM	285	CB	ALA	32	73.598	-4.574	30.100	1.00	17.68	L
ATOM	286	C	ALA	32	71.104	-4.366	30.612	1.00	35.60	L
ATOM	287	O	ALA	32	70.931	-5.189	29.681	1.00	17.68	L
ATOM	288	N	VAL	33	70.112	-3.960	31.424	1.00	13.04	L
ATOM	289	H	VAL	33	70.325	-3.322	32.127	1.00	0.00	L
ATOM	290	CA	VAL	33	68.699	-4.430	31.321	1.00	13.04	L
ATOM	291	CB	VAL	33	68.273	-5.298	32.627	1.00	4.00	L
ATOM	292	CG1	VAL	33	68.176	-4.356	33.838	1.00	4.00	L
ATOM	293	CG2	VAL	33	66.977	-6.149	32.399	1.00	4.00	L
ATOM	294	C	VAL	33	67.978	-3.066	31.281	1.00	13.04	L
ATOM	295	O	VAL	33	68.486	-2.096	31.764	1.00	4.00	L
ATOM	296	N	HIS	34	66.799	-2.963	30.717	1.00	30.88	L
ATOM	297	H	HIS	34	66.336	-3.745	30.342	1.00	0.00	L
ATOM	298	CA	HIS	34	66.175	-1.646	30.674	1.00	30.88	L
ATOM	299	CB	HIS	34	66.385	-1.002	29.284	1.00	16.89	L
ATOM	300	CG	HIS	34	67.722	-1.310	28.698	1.00	16.89	L
ATOM	301	CD2	HIS	34	68.152	-2.368	27.969	1.00	16.89	L
ATOM	302	ND1	HIS	34	68.838	-0.553	28.967	1.00	16.89	L
ATOM	303	HD1	HIS	34	68.839	0.274	29.480	1.00	0.00	L
ATOM	304	CE1	HIS	34	69.900	-1.130	28.433	1.00	16.89	L
ATOM	305	NE2	HIS	34	69.511	-2.234	27.824	1.00	16.89	L
ATOM	306	HE2	HIS	34	70.100	-2.854	27.332	1.00	0.00	L
ATOM	307	C	HIS	34	64.705	-1.802	30.936	1.00	30.88	L
ATOM	308	O	HIS	34	64.196	-2.924	30.881	1.00	16.89	L
ATOM	309	N	TRP	35	64.014	-0.697	31.219	1.00	16.04	L
ATOM	310	H	TRP	35	64.436	0.161	31.276	1.00	0.00	L
ATOM	311	CA	TRP	35	62.590	-0.770	31.460	1.00	16.04	L
ATOM	312	CB	TRP	35	62.287	-0.337	32.885	1.00	13.14	L
ATOM	313	CG	TRP	35	62.884	-1.212	33.888	1.00	13.14	L
ATOM	314	CD2	TRP	35	62.278	-2.359	34.503	1.00	13.14	L
ATOM	315	CE2	TRP	35	63.187	-2.837	35.470	1.00	13.14	L
ATOM	316	CE3	TRP	35	61.052	-3.026	34.335	1.00	13.14	L
ATOM	317	CD1	TRP	35	64.080	-1.051	34.459	1.00	13.14	L
ATOM	318	NE1	TRP	35	64.284	-2.021	35.417	1.00	13.14	L
ATOM	319	HE1	TRP	35	65.086	-2.114	35.985	1.00	0.00	L
ATOM	320	CZ2	TRP	35	62.917	-3.968	36.293	1.00	13.14	L
ATOM	321	CZ3	TRP	35	60.771	-4.158	35.144	1.00	13.14	L
ATOM	322	CH2	TRP	35	61.710	-4.615	36.116	1.00	13.14	L
ATOM	323	C	TRP	35	61.757	0.031	30.470	1.00	16.04	L
ATOM	324	O	TRP	35	62.148	1.113	30.022	1.00	13.14	L
ATOM	325	N	TYR	36	60.605	-0.542	30.125	1.00	26.41	L
ATOM	326	H	TYR	36	60.386	-1.413	30.510	1.00	0.00	L
ATOM	327	CA	TYR	36	59.642	0.052	29.217	1.00	26.41	L
ATOM	328	CB	TYR	36	59.614	-0.710	27.902	1.00	16.21	L
ATOM	329	CG	TYR	36	60.946	-0.742	27.171	1.00	16.21	L
ATOM	330	CD1	TYR	36	61.162	0.070	26.042	1.00	16.21	L
ATOM	331	CE1	TYR	36	62.376	0.101	25.412	1.00	16.21	L
ATOM	332	CD2	TYR	36	62.004	-1.544	27.644	1.00	16.21	L
ATOM	333	CE2	TYR	36	63.235	-1.523	27.012	1.00	16.21	L

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ATOM	334	CZ	TYR	36	63.409	-0.682	25.884	1.00	16.21	L
ATOM	335	OH	TYR	36	64.612	-0.613	25.238	1.00	16.21	L
ATOM	336	HH	TYR	36	64.764	-1.405	24.737	1.00	0.00	L
ATOM	337	C	TYR	36	58.253	-0.006	29.844	1.00	26.41	L
ATOM	338	O	TYR	36	57.940	-0.891	30.648	1.00	16.21	L
ATOM	339	N	GLN	37	57.411	0.940	29.466	1.00	18.25	L
ATOM	340	H	GLN	37	57.709	1.629	28.845	1.00	0.00	L
ATOM	341	CA	GLN	37	56.045	0.988	29.970	1.00	18.25	L
ATOM	342	CB	GLN	37	55.807	2.235	30.841	1.00	6.97	L
ATOM	343	CG	GLN	37	54.362	2.680	30.788	1.00	6.97	L
ATOM	344	CD	GLN	37	54.176	4.094	31.163	1.00	6.97	L
ATOM	345	OE1	GLN	37	54.305	4.983	30.342	1.00	6.97	L
ATOM	346	NE2	GLN	37	53.869	4.324	32.420	1.00	6.97	L
ATOM	347	HE21	GLN	37	54.571	4.651	33.032	1.00	0.00	L
ATOM	348	HE22	GLN	37	52.947	4.168	32.704	1.00	0.00	L
ATOM	349	C	GLN	37	55.167	1.080	28.757	1.00	18.25	L
ATOM	350	O	GLN	37	55.316	1.988	27.981	1.00	6.97	L
ATOM	351	N	GLN	38	54.247	0.145	28.602	1.00	29.68	L
ATOM	352	H	GLN	38	54.158	-0.562	29.268	1.00	0.00	L
ATOM	353	CA	GLN	38	53.361	0.172	27.452	1.00	29.68	L
ATOM	354	CB	GLN	38	53.375	-1.163	26.747	1.00	18.03	L
ATOM	355	CG	GLN	38	52.962	-1.088	25.309	1.00	18.03	L
ATOM	356	CD	GLN	38	52.970	-2.439	24.695	1.00	18.03	L
ATOM	357	OE1	GLN	38	52.752	-3.434	25.375	1.00	18.03	L
ATOM	358	NE2	GLN	38	53.232	-2.502	23.410	1.00	18.03	L
ATOM	359	HE21	GLN	38	53.582	-3.348	23.055	1.00	0.00	L
ATOM	360	HE22	GLN	38	53.067	-1.713	22.857	1.00	0.00	L
ATOM	361	C	GLN	38	51.949	0.482	27.864	1.00	29.68	L
ATOM	362	O	GLN	38	51.394	-0.184	28.740	1.00	18.03	L
ATOM	363	N	LYS	39	51.368	1.481	27.212	1.00	6.53	L
ATOM	364	H	LYS	39	51.877	1.933	26.518	1.00	0.00	L
ATOM	365	CA	LYS	39	50.007	1.905	27.498	1.00	6.53	L
ATOM	366	CB	LYS	39	49.926	3.439	27.571	1.00	31.82	L
ATOM	367	CG	LYS	39	50.493	4.105	28.823	1.00	31.82	L
ATOM	368	CD	LYS	39	50.071	5.567	28.812	1.00	31.82	L
ATOM	369	CE	LYS	39	51.174	6.541	29.278	1.00	31.82	L
ATOM	370	NZ	LYS	39	51.459	6.518	30.761	1.00	31.82	L
ATOM	371	HZ1	LYS	39	51.298	5.563	31.112	1.00	0.00	L
ATOM	372	HZ2	LYS	39	50.865	7.200	31.266	1.00	0.00	L
ATOM	373	HZ3	LYS	39	52.475	6.755	30.906	1.00	0.00	L
ATOM	374	C	LYS	39	49.157	1.442	26.352	1.00	6.53	L
ATOM	375	O	LYS	39	49.573	1.507	25.204	1.00	31.82	L
ATOM	376	N	PRO	40	47.928	1.007	26.638	1.00	21.88	L
ATOM	377	CD	PRO	40	47.359	0.991	27.985	1.00	23.36	L
ATOM	378	CA	PRO	40	46.960	0.512	25.629	1.00	21.88	L
ATOM	379	CB	PRO	40	45.635	0.484	26.355	1.00	23.36	L
ATOM	380	CG	PRO	40	45.920	1.230	27.675	1.00	23.36	L
ATOM	381	C	PRO	40	46.916	1.424	24.449	1.00	21.88	L
ATOM	382	O	PRO	40	46.827	2.626	24.610	1.00	23.36	L
ATOM	383	N	GLY	41	47.038	0.833	23.269	1.00	29.05	L
ATOM	384	H	GLY	41	47.139	-0.135	23.241	1.00	0.00	L
ATOM	385	CA	GLY	41	47.031	1.573	22.026	1.00	29.05	L
ATOM	386	C	GLY	41	48.398	1.840	21.393	1.00	29.05	L
ATOM	387	O	GLY	41	48.531	1.848	20.172	1.00	23.44	L
ATOM	388	N	GLN	42	49.418	2.007	22.232	1.00	38.25	L
ATOM	389	H	GLN	42	49.249	1.867	23.188	1.00	0.00	L

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ATOM	390	CA	GLN	42	50.768	2.377	21.812	1.00	38.25	L
ATOM	391	CB	GLN	42	51.163	3.541	22.717	1.00	46.42	L
ATOM	392	CG	GLN	42	49.956	4.353	23.206	1.00	46.42	L
ATOM	393	CD	GLN	42	50.328	5.468	24.201	1.00	46.42	L
ATOM	394	OE1	GLN	42	49.739	6.554	24.177	1.00	46.42	L
ATOM	395	NE2	GLN	42	51.304	5.191	25.082	1.00	46.42	L
ATOM	396	HE21	GLN	42	51.064	4.985	26.005	1.00	0.00	L
ATOM	397	HE22	GLN	42	52.234	5.203	24.758	1.00	0.00	L
ATOM	398	C	GLN	42	51.945	1.342	21.745	1.00	38.25	L
ATOM	399	O	GLN	42	51.820	0.214	22.223	1.00	46.42	L
ATOM	400	N	PRO	43	53.089	1.706	21.102	1.00	2.00	L
ATOM	401	CD	PRO	43	53.434	2.920	20.357	1.00	22.35	L
ATOM	402	CA	PRO	43	54.195	0.768	21.052	1.00	2.00	L
ATOM	403	CB	PRO	43	55.050	1.312	19.941	1.00	22.35	L
ATOM	404	CG	PRO	43	54.895	2.750	20.107	1.00	22.35	L
ATOM	405	C	PRO	43	54.829	1.065	22.355	1.00	2.00	L
ATOM	406	O	PRO	43	54.515	2.084	22.954	1.00	22.35	L
ATOM	407	N	PRO	44	55.734	0.200	22.818	1.00	20.50	L
ATOM	408	CD	PRO	44	56.085	-1.072	22.172	1.00	26.74	L
ATOM	409	CA	PRO	44	56.448	0.373	24.102	1.00	20.50	L
ATOM	410	CB	PRO	44	57.344	-0.857	24.186	1.00	26.74	L
ATOM	411	CG	PRO	44	56.618	-1.875	23.358	1.00	26.74	L
ATOM	412	C	PRO	44	57.208	1.679	24.208	1.00	20.50	L
ATOM	413	O	PRO	44	57.538	2.323	23.203	1.00	26.74	L
ATOM	414	N	LYS	45	57.440	2.067	25.452	1.00	21.53	L
ATOM	415	H	LYS	45	57.154	1.485	26.181	1.00	0.00	L
ATOM	416	CA	LYS	45	58.119	3.315	25.807	1.00	21.53	L
ATOM	417	CB	LYS	45	57.115	4.292	26.393	1.00	26.74	L
ATOM	418	CG	LYS	45	57.448	5.752	26.210	1.00	26.74	L
ATOM	419	CD	LYS	45	57.361	6.554	27.525	1.00	26.74	L
ATOM	420	CE	LYS	45	58.137	7.897	27.406	1.00	26.74	L
ATOM	421	NZ	LYS	45	59.553	7.786	26.765	1.00	26.74	L
ATOM	422	HZ1	LYS	45	60.204	8.464	27.193	1.00	0.00	L
ATOM	423	HZ2	LYS	45	59.460	7.962	25.743	1.00	0.00	L
ATOM	424	HZ3	LYS	45	59.910	6.812	26.904	1.00	0.00	L
ATOM	425	C	LYS	45	59.219	3.058	26.829	1.00	21.53	L
ATOM	426	O	LYS	45	59.093	2.216	27.706	1.00	26.74	L
ATOM	427	N	LEU	46	60.311	3.789	26.697	1.00	26.71	L
ATOM	428	H	LEU	46	60.369	4.457	25.981	1.00	0.00	L
ATOM	429	CA	LEU	46	61.417	3.612	27.611	1.00	26.71	L
ATOM	430	CB	LEU	46	62.745	3.743	26.871	1.00	21.02	L
ATOM	431	CG	LEU	46	63.871	3.508	27.891	1.00	21.02	L
ATOM	432	CD1	LEU	46	64.018	2.021	28.101	1.00	21.02	L
ATOM	433	CD2	LEU	46	65.180	4.165	27.445	1.00	21.02	L
ATOM	434	C	LEU	46	61.383	4.602	28.768	1.00	26.71	L
ATOM	435	O	LEU	46	61.032	5.768	28.621	1.00	21.02	L
ATOM	436	N	LEU	47	61.749	4.114	29.933	1.00	10.23	L
ATOM	437	H	LEU	47	61.987	3.162	30.011	1.00	0.00	L
ATOM	438	CA	LEU	47	61.774	4.969	31.100	1.00	10.23	L
ATOM	439	CB	LEU	47	60.578	4.696	32.055	1.00	20.80	L
ATOM	440	CG	LEU	47	59.568	3.586	31.757	1.00	20.80	L
ATOM	441	CD1	LEU	47	59.385	2.758	32.978	1.00	20.80	L
ATOM	442	CD2	LEU	47	58.250	4.173	31.358	1.00	20.80	L
ATOM	443	C	LEU	47	63.063	4.741	31.827	1.00	10.23	L
ATOM	444	O	LEU	47	63.611	5.652	32.431	1.00	20.80	L
ATOM	445	N	ILE	48	63.556	3.514	31.783	1.00	25.64	L

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ATOM	446	H	ILE	48	63.094	2.790	31.309	1.00	0.00	L
ATOM	447	CA	ILE	48	64.794	3.253	32.467	1.00	25.64	L
ATOM	448	CB	ILE	48	64.502	2.528	33.782	1.00	29.39	L
ATOM	449	CG2	ILE	48	65.643	1.600	34.161	1.00	29.39	L
ATOM	450	CG1	ILE	48	64.275	3.560	34.871	1.00	29.39	L
ATOM	451	CD1	ILE	48	62.882	3.586	35.317	1.00	29.39	L
ATOM	452	C	ILE	48	65.764	2.450	31.614	1.00	25.64	L
ATOM	453	O	ILE	48	65.387	1.382	31.140	1.00	29.39	L
ATOM	454	N	LYS	49	66.981	2.997	31.376	1.00	26.94	L
ATOM	455	H	LYS	49	67.166	3.902	31.718	1.00	0.00	L
ATOM	456	CA	LYS	49	68.045	2.299	30.612	1.00	26.94	L
ATOM	457	CB	LYS	49	68.483	3.050	29.365	1.00	19.84	L
ATOM	458	CG	LYS	49	69.182	4.347	29.623	1.00	19.84	L
ATOM	459	CD	LYS	49	68.432	5.478	28.916	1.00	19.84	L
ATOM	460	CE	LYS	49	69.381	6.539	28.372	1.00	19.84	L
ATOM	461	NZ	LYS	49	69.390	6.621	26.837	1.00	19.84	L
ATOM	462	HZ1	LYS	49	68.907	7.510	26.568	1.00	0.00	L
ATOM	463	HZ2	LYS	49	68.909	5.825	26.402	1.00	0.00	L
ATOM	464	HZ3	LYS	49	70.380	6.691	26.494	1.00	0.00	L
ATOM	465	C	LYS	49	69.225	2.179	31.522	1.00	26.94	L
ATOM	466	O	LYS	49	69.625	3.171	32.107	1.00	19.84	L
ATOM	467	N	TYR	50	69.743	0.950	31.635	1.00	24.65	L
ATOM	468	H	TYR	50	69.315	0.234	31.110	1.00	0.00	L
ATOM	469	CA	TYR	50	70.892	0.549	32.493	1.00	24.65	L
ATOM	470	CB	TYR	50	72.108	1.482	32.370	1.00	11.79	L
ATOM	471	CG	TYR	50	72.590	1.558	30.957	1.00	11.79	L
ATOM	472	CD1	TYR	50	72.416	2.716	30.213	1.00	11.79	L
ATOM	473	CE1	TYR	50	72.745	2.759	28.892	1.00	11.79	L
ATOM	474	CD2	TYR	50	73.129	0.428	30.323	1.00	11.79	L
ATOM	475	CE2	TYR	50	73.466	0.463	28.991	1.00	11.79	L
ATOM	476	CZ	TYR	50	73.262	1.639	28.292	1.00	11.79	L
ATOM	477	OH	TYR	50	73.539	1.703	26.973	1.00	11.79	L
ATOM	478	HH	TYR	50	73.614	2.613	26.681	1.00	0.00	L
ATOM	479	C	TYR	50	70.560	0.419	33.962	1.00	24.65	L
ATOM	480	O	TYR	50	71.171	1.095	34.782	1.00	11.79	L
ATOM	481	N	ALA	51	69.605	-0.467	34.270	1.00	21.59	L
ATOM	482	H	ALA	51	69.192	-0.973	33.538	1.00	0.00	L
ATOM	483	CA	ALA	51	69.156	-0.695	35.627	1.00	21.59	L
ATOM	484	CB	ALA	51	70.231	-1.377	36.415	1.00	13.57	L
ATOM	485	C	ALA	51	68.747	0.570	36.362	1.00	21.59	L
ATOM	486	O	ALA	51	68.099	0.484	37.372	1.00	13.57	L
ATOM	487	N	SER	52	69.070	1.752	35.864	1.00	16.80	L
ATOM	488	H	SER	52	69.525	1.887	35.003	1.00	0.00	L
ATOM	489	CA	SER	52	68.718	2.906	36.666	1.00	16.80	L
ATOM	490	CB	SER	52	69.587	2.890	37.887	1.00	29.24	L
ATOM	491	OG	SER	52	70.855	3.369	37.492	1.00	29.24	L
ATOM	492	HG	SER	52	71.481	2.643	37.471	1.00	0.00	L
ATOM	493	C	SER	52	68.821	4.325	36.102	1.00	16.80	L
ATOM	494	O	SER	52	68.597	5.288	36.848	1.00	29.24	L
ATOM	495	N	ALA	53	69.183	4.495	34.835	1.00	26.28	L
ATOM	496	H	ALA	53	69.357	3.724	34.258	1.00	0.00	L
ATOM	497	CA	ALA	53	69.301	5.862	34.354	1.00	26.28	L
ATOM	498	CB	ALA	53	70.465	5.981	33.401	1.00	10.76	L
ATOM	499	C	ALA	53	67.992	6.277	33.718	1.00	26.28	L
ATOM	500	O	ALA	53	67.530	5.648	32.761	1.00	10.76	L
ATOM	501	N	LEU	54	67.382	7.327	34.281	1.00	18.29	L

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ATOM	502	H	LEU	54	67.803	7.782	35.028	1.00	0.00	L
ATOM	503	CA	LEU	54	66.094	7.808	33.796	1.00	18.29	L
ATOM	504	CB	LEU	54	65.531	8.839	34.748	1.00	38.41	L
ATOM	505	CG	LEU	54	64.429	8.254	35.626	1.00	38.41	L
ATOM	506	CD1	LEU	54	64.797	8.427	37.132	1.00	38.41	L
ATOM	507	CD2	LEU	54	63.094	8.936	35.271	1.00	38.41	L
ATOM	508	C	LEU	54	66.190	8.406	32.431	1.00	18.29	L
ATOM	509	O	LEU	54	66.911	9.376	32.233	1.00	38.41	L
ATOM	510	N	GLU	55	65.485	7.816	31.476	1.00	26.87	L
ATOM	511	H	GLU	55	64.965	7.012	31.672	1.00	0.00	L
ATOM	512	CA	GLU	55	65.500	8.354	30.130	1.00	26.87	L
ATOM	513	CB	GLU	55	64.773	7.427	29.153	1.00	45.51	L
ATOM	514	CG	GLU	55	64.866	7.893	27.672	1.00	45.51	L
ATOM	515	CD	GLU	55	66.320	8.077	27.140	1.00	45.51	L
ATOM	516	OE1	GLU	55	66.544	7.912	25.910	1.00	45.51	L
ATOM	517	OE2	GLU	55	67.236	8.395	27.946	1.00	45.51	L
ATOM	518	C	GLU	55	64.902	9.763	30.096	1.00	26.87	L
ATOM	519	O	GLU	55	63.906	10.090	30.747	1.00	45.51	L
ATOM	520	N	SER	56	65.566	10.579	29.311	1.00	15.82	L
ATOM	521	H	SER	56	66.319	10.197	28.802	1.00	0.00	L
ATOM	522	CA	SER	56	65.271	11.970	29.109	1.00	15.82	L
ATOM	523	CB	SER	56	66.140	12.483	27.970	1.00	49.29	L
ATOM	524	OG	SER	56	67.213	11.565	27.749	1.00	49.29	L
ATOM	525	HG	SER	56	67.612	11.711	26.884	1.00	0.00	L
ATOM	526	C	SER	56	63.841	12.329	28.840	1.00	15.82	L
ATOM	527	O	SER	56	63.447	12.517	27.681	1.00	49.29	L
ATOM	528	N	GLY	57	63.070	12.457	29.913	1.00	29.44	L
ATOM	529	H	GLY	57	63.462	12.295	30.798	1.00	0.00	L
ATOM	530	CA	GLY	57	61.683	12.835	29.768	1.00	29.44	L
ATOM	531	C	GLY	57	60.774	12.220	30.802	1.00	29.44	L
ATOM	532	O	GLY	57	59.885	12.881	31.351	1.00	23.51	L
ATOM	533	N	VAL	58	61.001	10.939	31.061	1.00	32.28	L
ATOM	534	H	VAL	58	61.734	10.482	30.588	1.00	0.00	L
ATOM	535	CA	VAL	58	60.215	10.186	32.038	1.00	32.28	L
ATOM	536	CB	VAL	58	60.903	8.843	32.359	1.00	38.51	L
ATOM	537	CG1	VAL	58	60.092	8.057	33.397	1.00	38.51	L
ATOM	538	CG2	VAL	58	61.100	8.052	31.067	1.00	38.51	L
ATOM	539	C	VAL	58	59.971	10.921	33.360	1.00	32.28	L
ATOM	540	O	VAL	58	60.807	11.655	33.877	1.00	38.51	L
ATOM	541	N	PRO	59	58.797	10.736	33.919	1.00	19.68	L
ATOM	542	CD	PRO	59	57.657	9.949	33.434	1.00	27.83	L
ATOM	543	CA	PRO	59	58.523	11.420	35.183	1.00	19.68	L
ATOM	544	CB	PRO	59	57.083	11.049	35.502	1.00	27.83	L
ATOM	545	CG	PRO	59	56.500	10.589	34.161	1.00	27.83	L
ATOM	546	C	PRO	59	59.475	10.999	36.276	1.00	19.68	L
ATOM	547	O	PRO	59	59.958	9.852	36.310	1.00	27.83	L
ATOM	548	N	ALA	60	59.717	11.953	37.169	1.00	20.92	L
ATOM	549	H	ALA	60	59.250	12.800	37.068	1.00	0.00	L
ATOM	550	CA	ALA	60	60.648	11.804	38.294	1.00	20.92	L
ATOM	551	CB	ALA	60	60.714	13.108	39.082	1.00	24.45	L
ATOM	552	C	ALA	60	60.359	10.655	39.233	1.00	20.92	L
ATOM	553	O	ALA	60	61.271	9.996	39.699	1.00	24.45	L
ATOM	554	N	ARG	61	59.083	10.407	39.508	1.00	46.17	L
ATOM	555	H	ARG	61	58.382	10.958	39.104	1.00	0.00	L
ATOM	556	CA	ARG	61	58.707	9.316	40.412	1.00	46.17	L
ATOM	557	CB	ARG	61	57.186	9.248	40.547	1.00	16.64	L

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ATOM	558	CG	ARG	61	56.397	9.708	39.334	1.00	16.64	L
ATOM	559	CD	ARG	61	54.893	9.488	39.564	1.00	16.64	L
ATOM	560	NE	ARG	61	54.245	8.832	38.442	1.00	16.64	L
ATOM	561	HE	ARG	61	54.019	7.883	38.519	1.00	0.00	L
ATOM	562	CZ	ARG	61	53.941	9.443	37.289	1.00	16.64	L
ATOM	563	NH1	ARG	61	54.212	10.746	37.086	1.00	16.64	L
ATOM	564	HH11	ARG	61	53.481	11.390	36.899	1.00	0.00	L
ATOM	565	HH12	ARG	61	55.095	11.092	37.419	1.00	0.00	L
ATOM	566	NH2	ARG	61	53.362	8.745	36.323	1.00	16.64	L
ATOM	567	HH21	ARG	61	52.395	8.905	36.121	1.00	0.00	L
ATOM	568	HH22	ARG	61	53.936	8.291	35.641	1.00	0.00	L
ATOM	569	C	ARG	61	59.233	7.935	40.011	1.00	46.17	L
ATOM	570	O	ARG	61	59.169	6.997	40.816	1.00	16.64	L
ATOM	571	N	PHE	62	59.747	7.834	38.777	1.00	31.16	L
ATOM	572	H	PHE	62	59.766	8.646	38.215	1.00	0.00	L
ATOM	573	CA	PHE	62	60.267	6.579	38.241	1.00	31.16	L
ATOM	574	CB	PHE	62	60.077	6.497	36.729	1.00	17.47	L
ATOM	575	CG	PHE	62	58.647	6.301	36.315	1.00	17.47	L
ATOM	576	CD1	PHE	62	57.978	5.141	36.660	1.00	17.47	L
ATOM	577	CD2	PHE	62	57.958	7.306	35.649	1.00	17.47	L
ATOM	578	CE1	PHE	62	56.644	4.965	36.358	1.00	17.47	L
ATOM	579	CE2	PHE	62	56.631	7.154	35.339	1.00	17.47	L
ATOM	580	CZ	PHE	62	55.965	5.967	35.697	1.00	17.47	L
ATOM	581	C	PHE	62	61.715	6.463	38.562	1.00	31.16	L
ATOM	582	O	PHE	62	62.473	7.413	38.402	1.00	17.47	L
ATOM	583	N	SER	63	62.074	5.273	39.032	1.00	18.75	L
ATOM	584	H	SER	63	61.386	4.579	39.110	1.00	0.00	L
ATOM	585	CA	SER	63	63.433	4.945	39.449	1.00	18.75	L
ATOM	586	CB	SER	63	63.562	5.084	40.943	1.00	30.44	L
ATOM	587	OG	SER	63	62.438	4.457	41.523	1.00	30.44	L
ATOM	588	HG	SER	63	62.170	3.700	41.000	1.00	0.00	L
ATOM	589	C	SER	63	63.670	3.502	39.131	1.00	18.75	L
ATOM	590	O	SER	63	62.733	2.701	39.097	1.00	30.44	L
ATOM	591	N	GLY	64	64.939	3.178	38.926	1.00	36.70	L
ATOM	592	H	GLY	64	65.624	3.883	38.971	1.00	0.00	L
ATOM	593	CA	GLY	64	65.345	1.815	38.628	1.00	36.70	L
ATOM	594	C	GLY	64	66.607	1.458	39.390	1.00	36.70	L
ATOM	595	O	GLY	64	67.529	2.264	39.539	1.00	9.84	L
ATOM	596	N	SER	65	66.646	0.235	39.887	1.00	22.08	L
ATOM	597	H	SER	65	65.888	-0.374	39.729	1.00	0.00	L
ATOM	598	CA	SER	65	67.802	-0.235	40.645	1.00	22.08	L
ATOM	599	CB	SER	65	67.525	-0.182	42.146	1.00	31.87	L
ATOM	600	OG	SER	65	66.354	-0.944	42.454	1.00	31.87	L
ATOM	601	HG	SER	65	65.600	-0.586	41.986	1.00	0.00	L
ATOM	602	C	SER	65	67.979	-1.671	40.228	1.00	22.08	L
ATOM	603	O	SER	65	67.038	-2.306	39.730	1.00	31.87	L
ATOM	604	N	GLY	66	69.170	-2.202	40.434	1.00	30.58	L
ATOM	605	H	GLY	66	69.883	-1.676	40.851	1.00	0.00	L
ATOM	606	CA	GLY	66	69.380	-3.565	40.012	1.00	30.58	L
ATOM	607	C	GLY	66	70.835	-3.929	39.946	1.00	30.58	L
ATOM	608	O	GLY	66	71.707	-3.155	39.497	1.00	30.54	L
ATOM	609	N	SER	67	71.047	-5.167	40.350	1.00	23.92	L
ATOM	610	H	SER	67	70.267	-5.711	40.560	1.00	0.00	L
ATOM	611	CA	SER	67	72.362	-5.762	40.516	1.00	23.92	L
ATOM	612	CB	SER	67	72.544	-6.030	42.016	1.00	28.90	L
ATOM	613	OG	SER	67	71.327	-6.572	42.574	1.00	28.90	L



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ATOM	614	HG	SER	67	71.469	-7.044	43.387	1.00	0.00	L
ATOM	615	C	SER	67	72.530	-7.078	39.782	1.00	23.92	L
ATOM	616	O	SER	67	71.694	-7.974	39.896	1.00	28.90	L
ATOM	617	N	GLY	68	73.624	-7.191	39.054	1.00	25.62	L
ATOM	618	H	GLY	68	74.235	-6.422	38.995	1.00	0.00	L
ATOM	619	CA	GLY	68	73.904	-8.417	38.344	1.00	25.62	L
ATOM	620	C	GLY	68	72.772	-9.129	37.619	1.00	25.62	L
ATOM	621	O	GLY	68	72.632	-9.000	36.392	1.00	9.52	L
ATOM	622	N	THR	69	71.962	-9.879	38.363	1.00	26.70	L
ATOM	623	H	THR	69	72.111	-9.932	39.332	1.00	0.00	L
ATOM	624	CA	THR	69	70.862	-10.616	37.764	1.00	26.70	L
ATOM	625	CB	THR	69	71.136	-12.120	37.903	1.00	32.20	L
ATOM	626	OG1	THR	69	70.499	-12.641	39.076	1.00	32.20	L
ATOM	627	HG1	THR	69	69.575	-12.812	38.904	1.00	0.00	L
ATOM	628	CG2	THR	69	72.615	-12.344	38.034	1.00	32.20	L
ATOM	629	C	THR	69	69.470	-10.278	38.308	1.00	26.70	L
ATOM	630	O	THR	69	68.455	-10.705	37.749	1.00	32.20	L
ATOM	631	N	ASP	70	69.402	-9.520	39.391	1.00	17.57	L
ATOM	632	H	ASP	70	70.224	-9.188	39.801	1.00	0.00	L
ATOM	633	CA	ASP	70	68.092	-9.174	39.958	1.00	17.57	L
ATOM	634	CB	ASP	70	68.032	-9.588	41.427	1.00	58.88	L
ATOM	635	CG	ASP	70	67.908	-11.086	41.603	1.00	58.88	L
ATOM	636	OD1	ASP	70	66.783	-11.580	41.814	1.00	58.88	L
ATOM	637	OD2	ASP	70	68.949	-11.771	41.537	1.00	58.88	L
ATOM	638	C	ASP	70	67.849	-7.665	39.822	1.00	17.57	L
ATOM	639	O	ASP	70	68.723	-6.846	40.161	1.00	58.88	L
ATOM	640	N	PHE	71	66.678	-7.293	39.312	1.00	43.60	L
ATOM	641	H	PHE	71	66.036	-7.972	39.062	1.00	0.00	L
ATOM	642	CA	PHE	71	66.359	-5.874	39.123	1.00	43.60	L
ATOM	643	CB	PHE	71	66.546	-5.492	37.644	1.00	20.56	L
ATOM	644	CG	PHE	71	67.952	-5.677	37.161	1.00	20.56	L
ATOM	645	CD1	PHE	71	68.376	-6.914	36.684	1.00	20.56	L
ATOM	646	CD2	PHE	71	68.866	-4.653	37.287	1.00	20.56	L
ATOM	647	CE1	PHE	71	69.667	-7.143	36.356	1.00	20.56	L
ATOM	648	CE2	PHE	71	70.182	-4.857	36.964	1.00	20.56	L
ATOM	649	CZ	PHE	71	70.595	-6.118	36.495	1.00	20.56	L
ATOM	650	C	PHE	71	64.945	-5.506	39.598	1.00	43.60	L
ATOM	651	O	PHE	71	64.074	-6.374	39.772	1.00	20.56	L
ATOM	652	N	THR	72	64.719	-4.214	39.811	1.00	26.95	L
ATOM	653	H	THR	72	65.433	-3.552	39.653	1.00	0.00	L
ATOM	654	CA	THR	72	63.427	-3.772	40.282	1.00	26.95	L
ATOM	655	CB	THR	72	63.394	-3.739	41.822	1.00	20.23	L
ATOM	656	OG1	THR	72	64.527	-3.022	42.323	1.00	20.23	L
ATOM	657	HG1	THR	72	64.224	-2.250	42.806	1.00	0.00	L
ATOM	658	CG2	THR	72	63.444	-5.113	42.358	1.00	20.23	L
ATOM	659	C	THR	72	63.158	-2.381	39.761	1.00	26.95	L
ATOM	660	O	THR	72	64.029	-1.501	39.850	1.00	20.23	L
ATOM	661	N	LEU	73	61.965	-2.187	39.206	1.00	15.13	L
ATOM	662	H	LEU	73	61.328	-2.929	39.146	1.00	0.00	L
ATOM	663	CA	LEU	73	61.571	-0.895	38.696	1.00	15.13	L
ATOM	664	CB	LEU	73	60.835	-1.052	37.379	1.00	24.34	L
ATOM	665	CG	LEU	73	60.364	0.264	36.745	1.00	24.34	L
ATOM	666	CD1	LEU	73	59.186	0.817	37.533	1.00	24.34	L
ATOM	667	CD2	LEU	73	61.473	1.274	36.754	1.00	24.34	L
ATOM	668	C	LEU	73	60.626	-0.384	39.774	1.00	15.13	L
ATOM	669	O	LEU	73	59.757	-1.140	40.217	1.00	24.34	L

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ATOM	670	N	THR	74	60.763	0.865	40.221	1.00	15.60	L
ATOM	671	H	THR	74	61.442	1.462	39.862	1.00	0.00	L
ATOM	672	CA	THR	74	59.858	1.275	41.281	1.00	15.60	L
ATOM	673	CB	THR	74	60.551	1.193	42.647	1.00	32.44	L
ATOM	674	OG1	THR	74	60.082	2.263	43.473	1.00	32.44	L
ATOM	675	HG1	THR	74	59.746	1.923	44.302	1.00	0.00	L
ATOM	676	CG2	THR	74	62.035	1.324	42.494	1.00	32.44	L
ATOM	677	C	THR	74	59.217	2.644	41.135	1.00	15.60	L
ATOM	678	O	THR	74	59.900	3.623	40.792	1.00	32.44	L
ATOM	679	N	ILE	75	57.898	2.693	41.333	1.00	13.44	L
ATOM	680	H	ILE	75	57.369	1.917	41.485	1.00	0.00	L
ATOM	681	CA	ILE	75	57.163	3.943	41.277	1.00	13.44	L
ATOM	682	CB	ILE	75	55.790	3.794	40.628	1.00	14.08	L
ATOM	683	CG2	ILE	75	55.333	5.142	40.119	1.00	14.08	L
ATOM	684	CD1	ILE	75	55.864	2.819	39.466	1.00	14.08	L
ATOM	685	CD1	ILE	75	54.889	3.097	38.324	1.00	14.08	L
ATOM	686	C	ILE	75	56.941	4.495	42.691	1.00	13.44	L
ATOM	687	O	ILE	75	56.158	3.916	43.480	1.00	14.08	L
ATOM	688	N	SER	76	57.631	5.607	42.997	1.00	11.81	L
ATOM	689	H	SER	76	58.208	6.005	42.310	1.00	0.00	L
ATOM	690	CA	SER	76	57.560	6.234	44.321	1.00	11.81	L
ATOM	691	CB	SER	76	58.188	7.619	44.276	1.00	47.61	L
ATOM	692	OG	SER	76	57.875	8.220	43.039	1.00	47.61	L
ATOM	693	HG	SER	76	57.401	9.053	43.189	1.00	0.00	L
ATOM	694	C	SER	76	56.105	6.333	44.736	1.00	11.81	L
ATOM	695	O	SER	76	55.665	5.690	45.687	1.00	47.61	L
ATOM	696	N	SER	77	55.358	7.131	43.987	1.00	26.91	L
ATOM	697	H	SER	77	55.774	7.611	43.241	1.00	0.00	L
ATOM	698	CA	SER	77	53.938	7.320	44.215	1.00	26.91	L
ATOM	699	CB	SER	77	53.687	8.675	44.859	1.00	48.94	L
ATOM	700	OG	SER	77	54.684	9.594	44.459	1.00	48.94	L
ATOM	701	HG	SER	77	55.471	9.144	44.143	1.00	0.00	L
ATOM	702	C	SER	77	53.301	7.273	42.821	1.00	26.91	L
ATOM	703	O	SER	77	53.657	8.042	41.915	1.00	48.94	L
ATOM	704	N	VAL	78	52.366	6.347	42.654	1.00	30.42	L
ATOM	705	H	VAL	78	52.143	5.775	43.413	1.00	0.00	L
ATOM	706	CA	VAL	78	51.668	6.146	41.388	1.00	30.42	L
ATOM	707	CB	VAL	78	50.879	4.822	41.464	1.00	22.16	L
ATOM	708	CG1	VAL	78	49.648	4.880	40.597	1.00	22.16	L
ATOM	709	CG2	VAL	78	51.797	3.642	41.103	1.00	22.16	L
ATOM	710	C	VAL	78	50.707	7.263	41.019	1.00	30.42	L
ATOM	711	O	VAL	78	50.081	7.873	41.895	1.00	22.16	L
ATOM	712	N	GLU	79	50.608	7.539	39.721	1.00	20.62	L
ATOM	713	H	GLU	79	51.194	7.066	39.092	1.00	0.00	L
ATOM	714	CA	GLU	79	49.660	8.512	39.188	1.00	20.62	L
ATOM	715	CB	GLU	79	50.350	9.481	38.259	1.00	45.49	L
ATOM	716	CG	GLU	79	50.853	10.716	38.945	1.00	45.49	L
ATOM	717	CD	GLU	79	50.982	11.890	37.968	1.00	45.49	L
ATOM	718	OE1	GLU	79	50.847	11.646	36.741	1.00	45.49	L
ATOM	719	OE2	GLU	79	51.213	13.045	38.417	1.00	45.49	L
ATOM	720	C	GLU	79	48.686	7.627	38.391	1.00	20.62	L
ATOM	721	O	GLU	79	49.079	6.600	37.850	1.00	45.49	L
ATOM	722	N	PRO	80	47.409	8.015	38.287	1.00	21.47	L
ATOM	723	CD	PRO	80	46.759	9.216	38.825	1.00	30.49	L
ATOM	724	CA	PRO	80	46.449	7.195	37.545	1.00	21.47	L
ATOM	725	CB	PRO	80	45.147	7.970	37.653	1.00	30.49	L

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ATOM	726	CG	PRO	80	45.314	8.827	38.802	1.00	30.49	L
ATOM	727	C	PRO	80	46.785	6.906	36.105	1.00	21.47	L
ATOM	728	O	PRO	80	46.267	5.966	35.534	1.00	30.49	L
ATOM	729	N	GLU	81	47.653	7.698	35.507	1.00	38.97	L
ATOM	730	H	GLU	81	48.061	8.411	36.028	1.00	0.00	L
ATOM	731	CA	GLU	81	47.982	7.479	34.111	1.00	38.97	L
ATOM	732	CB	GLU	81	48.466	8.764	33.462	1.00	19.68	L
ATOM	733	CG	GLU	81	48.767	9.879	34.467	1.00	19.68	L
ATOM	734	CD	GLU	81	47.534	10.407	35.253	1.00	19.68	L
ATOM	735	OE1	GLU	81	46.689	11.149	34.663	1.00	19.68	L
ATOM	736	OE2	GLU	81	47.444	10.079	36.465	1.00	19.68	L
ATOM	737	C	GLU	81	49.025	6.418	33.999	1.00	38.97	L
ATOM	738	O	GLU	81	49.387	6.026	32.910	1.00	19.68	L
ATOM	739	N	ASP	82	49.478	5.922	35.141	1.00	28.17	L
ATOM	740	H	ASP	82	49.126	6.252	35.982	1.00	0.00	L
ATOM	741	CA	ASP	82	50.502	4.883	35.138	1.00	28.17	L
ATOM	742	CB	ASP	82	51.236	4.845	36.464	1.00	8.94	L
ATOM	743	CG	ASP	82	52.171	6.035	36.609	1.00	8.94	L
ATOM	744	OD1	ASP	82	52.351	6.730	35.577	1.00	8.94	L
ATOM	745	OD2	ASP	82	52.731	6.308	37.703	1.00	8.94	L
ATOM	746	C	ASP	82	50.000	3.508	34.770	1.00	28.17	L
ATOM	747	O	ASP	82	50.775	2.580	34.570	1.00	8.94	L
ATOM	748	N	PHE	83	48.694	3.378	34.646	1.00	38.29	L
ATOM	749	H	PHE	83	48.107	4.152	34.780	1.00	0.00	L
ATOM	750	CA	PHE	83	48.158	2.091	34.282	1.00	38.29	L
ATOM	751	CB	PHE	83	46.703	2.207	33.994	1.00	2.00	L
ATOM	752	CG	PHE	83	46.223	1.158	33.139	1.00	2.00	L
ATOM	753	CD1	PHE	83	45.929	-0.082	33.662	1.00	2.00	L
ATOM	754	CD2	PHE	83	46.010	1.392	31.800	1.00	2.00	L
ATOM	755	CE1	PHE	83	45.426	-1.065	32.868	1.00	2.00	L
ATOM	756	CE2	PHE	83	45.491	0.381	30.994	1.00	2.00	L
ATOM	757	CZ	PHE	83	45.205	-0.842	31.545	1.00	2.00	L
ATOM	758	C	PHE	83	48.892	1.684	33.010	1.00	38.29	L
ATOM	759	O	PHE	83	49.143	2.530	32.123	1.00	2.00	L
ATOM	760	N	ALA	84	49.230	0.405	32.907	1.00	8.56	L
ATOM	761	H	ALA	84	48.958	-0.223	33.618	1.00	0.00	L
ATOM	762	CA	ALA	84	50.007	-0.050	31.770	1.00	8.56	L
ATOM	763	CB	ALA	84	50.983	1.034	31.375	1.00	2.00	L
ATOM	764	C	ALA	84	50.799	-1.330	32.054	1.00	8.56	L
ATOM	765	O	ALA	84	50.796	-1.878	33.175	1.00	2.00	L
ATOM	766	N	THR	85	51.462	-1.840	31.028	1.00	9.26	L
ATOM	767	H	THR	85	51.410	-1.433	30.142	1.00	0.00	L
ATOM	768	CA	THR	85	52.239	-3.022	31.289	1.00	9.26	L
ATOM	769	CB	THR	85	51.998	-4.139	30.301	1.00	21.39	L
ATOM	770	OG1	THR	85	50.686	-4.692	30.501	1.00	21.39	L
ATOM	771	HG1	THR	85	50.166	-4.111	31.065	1.00	0.00	L
ATOM	772	CG2	THR	85	53.000	-5.227	30.543	1.00	21.39	L
ATOM	773	C	THR	85	53.682	-2.623	31.266	1.00	9.26	L
ATOM	774	O	THR	85	54.112	-1.803	30.462	1.00	21.39	L
ATOM	775	N	TYR	86	54.452	-3.188	32.168	1.00	33.52	L
ATOM	776	H	TYR	86	54.092	-3.849	32.793	1.00	0.00	L
ATOM	777	CA	TYR	86	55.838	-2.804	32.193	1.00	33.52	L
ATOM	778	CB	TYR	86	56.189	-2.202	33.563	1.00	18.59	L
ATOM	779	CG	TYR	86	55.442	-0.919	33.839	1.00	18.59	L
ATOM	780	CD1	TYR	86	54.115	-0.941	34.295	1.00	18.59	L
ATOM	781	CE1	TYR	86	53.391	0.209	34.448	1.00	18.59	L

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ATOM	782	CD2 TYR	86	56.017	0.312	33.564	1.00	18.59	L
ATOM	783	CE2 TYR	86	55.286	1.482	33.713	1.00	18.59	L
ATOM	784	CZ TYR	86	53.970	1.413	34.142	1.00	18.59	L
ATOM	785	OH TYR	86	53.200	2.535	34.137	1.00	18.59	L
ATOM	786	HH TYR	86	52.549	2.492	33.448	1.00	0.00	L
ATOM	787	C TYR	86	56.779	-3.945	31.840	1.00	33.52	L
ATOM	788	O TYR	86	56.643	-5.087	32.338	1.00	18.59	L
ATOM	789	N TYR	87	57.736	-3.620	30.972	1.00	29.30	L
ATOM	790	H TYR	87	57.788	-2.718	30.604	1.00	0.00	L
ATOM	791	CA TYR	87	58.710	-4.611	30.542	1.00	29.30	L
ATOM	792	CB TYR	87	58.603	-4.851	29.019	1.00	28.43	L
ATOM	793	CG TYR	87	57.236	-5.172	28.472	1.00	28.43	L
ATOM	794	CD1 TYR	87	56.728	-6.461	28.520	1.00	28.43	L
ATOM	795	CE1 TYR	87	55.481	-6.752	27.958	1.00	28.43	L
ATOM	796	CD2 TYR	87	56.470	-4.173	27.852	1.00	28.43	L
ATOM	797	CE2 TYR	87	55.229	-4.447	27.290	1.00	28.43	L
ATOM	798	CZ TYR	87	54.742	-5.731	27.345	1.00	28.43	L
ATOM	799	OH TYR	87	53.512	-5.980	26.789	1.00	28.43	L
ATOM	800	HH TYR	87	53.616	-6.313	25.897	1.00	0.00	L
ATOM	801	C TYR	87	60.175	-4.298	30.841	1.00	29.30	L
ATOM	802	O TYR	87	60.617	-3.162	30.696	1.00	28.43	L
ATOM	803	N CYS	88	60.918	-5.320	31.259	1.00	22.79	L
ATOM	804	H CYS	88	60.517	-6.182	31.433	1.00	0.00	L
ATOM	805	CA CYS	88	62.365	-5.173	31.453	1.00	22.79	L
ATOM	806	C CYS	88	62.935	-5.857	30.180	1.00	22.79	L
ATOM	807	O CYS	88	62.324	-6.795	29.627	1.00	37.72	L
ATOM	808	CB CYS	88	62.856	-5.885	32.721	1.00	37.72	L
ATOM	809	SG CYS	88	62.532	-7.663	32.722	1.00	37.72	L
ATOM	810	N GLN	89	64.061	-5.361	29.679	1.00	41.42	L
ATOM	811	H GLN	89	64.491	-4.609	30.113	1.00	0.00	L
ATOM	812	CA GLN	89	64.681	-5.927	28.473	1.00	41.42	L
ATOM	813	CB GLN	89	64.212	-5.138	27.219	1.00	31.20	L
ATOM	814	CG GLN	89	64.951	-5.432	25.923	1.00	31.20	L
ATOM	815	CD GLN	89	66.153	-4.516	25.764	1.00	31.20	L
ATOM	816	OE1 GLN	89	66.064	-3.339	26.062	1.00	31.20	L
ATOM	817	NE2 GLN	89	67.286	-5.060	25.308	1.00	31.20	L
ATOM	818	HE21 GLN	89	68.122	-4.811	25.733	1.00	0.00	L
ATOM	819	HE22 GLN	89	67.215	-5.697	24.551	1.00	0.00	L
ATOM	820	C GLN	89	66.207	-5.886	28.643	1.00	41.42	L
ATOM	821	O GLN	89	66.781	-4.838	28.972	1.00	31.20	L
ATOM	822	N HIS	90	66.852	-7.041	28.456	1.00	26.12	L
ATOM	823	H HIS	90	66.348	-7.846	28.207	1.00	0.00	L
ATOM	824	CA HIS	90	68.305	-7.093	28.616	1.00	26.12	L
ATOM	825	CB HIS	90	68.773	-8.427	29.253	1.00	19.29	L
ATOM	826	CG HIS	90	69.156	-9.476	28.254	1.00	19.29	L
ATOM	827	CD2 HIS	90	68.419	-10.431	27.643	1.00	19.29	L
ATOM	828	ND1 HIS	90	70.424	-9.574	27.718	1.00	19.29	L
ATOM	829	HD1 HIS	90	71.182	-9.007	27.978	1.00	0.00	L
ATOM	830	CE1 HIS	90	70.451	-10.540	26.821	1.00	19.29	L
ATOM	831	NE2 HIS	90	69.247	-11.076	26.757	1.00	19.29	L
ATOM	832	HE2 HIS	90	68.980	-11.816	26.178	1.00	0.00	L
ATOM	833	C HIS	90	68.988	-6.895	27.281	1.00	26.12	L
ATOM	834	O HIS	90	68.453	-7.203	26.219	1.00	19.29	L
ATOM	835	N SER	91	70.195	-6.374	27.355	1.00	29.57	L
ATOM	836	H SER	91	70.566	-6.176	28.241	1.00	0.00	L
ATOM	837	CA SER	91	70.958	-6.113	26.160	1.00	29.57	L

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ATOM	838	CB	SER	91	70.857	-4.615	25.784	1.00	18.43	L
ATOM	839	OG	SER	91	71.810	-3.817	26.460	1.00	18.43	L
ATOM	840	HG	SER	91	72.526	-3.574	25.872	1.00	0.00	L
ATOM	841	C	SER	91	72.387	-6.531	26.416	1.00	29.57	L
ATOM	842	O	SER	91	73.294	-5.993	25.814	1.00	18.43	L
ATOM	843	N	TRP	92	72.570	-7.485	27.322	0.00	20.00	L
ATOM	844	H	TRP	92	71.785	-7.860	27.764	1.00	0.00	L
ATOM	845	CA	TRP	92	73.892	-7.989	27.678	0.00	20.00	L
ATOM	846	CB	TRP	92	73.784	-8.997	28.811	0.00	20.00	L
ATOM	847	CG	TRP	92	75.073	-9.711	29.111	0.00	20.00	L
ATOM	848	CD2	TRP	92	76.150	-9.216	29.914	0.00	20.00	L
ATOM	849	CE2	TRP	92	77.084	-10.264	30.052	0.00	20.00	L
ATOM	850	CE3	TRP	92	76.411	-7.988	30.537	0.00	20.00	L
ATOM	851	CD1	TRP	92	75.395	-10.997	28.789	0.00	20.00	L
ATOM	852	NE1	TRP	92	76.598	-11.337	29.355	0.00	20.00	L
ATOM	853	HE1	TRP	92	77.031	-12.210	29.273	1.00	0.00	L
ATOM	854	CZ2	TRP	92	78.263	-10.125	30.789	0.00	20.00	L
ATOM	855	CZ3	TRP	92	77.583	-7.849	31.272	0.00	20.00	L
ATOM	856	CH2	TRP	92	78.493	-8.916	31.391	0.00	20.00	L
ATOM	857	C	TRP	92	74.554	-8.696	26.523	0.00	20.00	L
ATOM	858	O	TRP	92	75.769	-8.885	26.501	0.00	20.00	L
ATOM	859	N	GLU	93	73.729	-9.097	25.576	1.00	30.57	L
ATOM	860	H	GLU	93	72.762	-8.880	25.659	1.00	0.00	L
ATOM	861	CA	GLU	93	74.166	-9.848	24.408	1.00	30.57	L
ATOM	862	CB	GLU	93	74.450	-11.277	24.826	1.00	30.85	L
ATOM	863	CG	GLU	93	73.230	-12.165	24.679	1.00	30.85	L
ATOM	864	CD	GLU	93	73.513	-13.592	25.067	1.00	30.85	L
ATOM	865	OE1	GLU	93	74.563	-13.812	25.709	1.00	30.85	L
ATOM	866	OE2	GLU	93	72.689	-14.475	24.730	1.00	30.85	L
ATOM	867	C	GLU	93	73.124	-9.897	23.267	1.00	30.57	L
ATOM	868	O	GLU	93	72.105	-9.164	23.274	1.00	30.85	L
ATOM	869	N	ILE	94	73.402	-10.768	22.293	1.00	12.13	L
ATOM	870	H	ILE	94	74.222	-11.298	22.344	1.00	0.00	L
ATOM	871	CA	ILE	94	72.523	-10.948	21.153	1.00	12.13	L
ATOM	872	CB	ILE	94	73.254	-10.831	19.811	1.00	17.81	L
ATOM	873	CG2	ILE	94	72.529	-11.617	18.747	1.00	17.81	L
ATOM	874	CG1	ILE	94	73.292	-9.358	19.369	1.00	17.81	L
ATOM	875	CD1	ILE	94	73.715	-9.129	17.881	1.00	17.81	L
ATOM	876	C	ILE	94	71.964	-12.338	21.288	1.00	12.13	L
ATOM	877	O	ILE	94	72.716	-13.268	21.574	1.00	17.81	L
ATOM	878	N	PRO	95	70.628	-12.500	21.159	1.00	29.48	L
ATOM	879	CD	PRO	95	69.992	-13.832	21.293	1.00	7.26	L
ATOM	880	CA	PRO	95	69.615	-11.459	20.902	1.00	29.48	L
ATOM	881	CB	PRO	95	68.487	-12.235	20.239	1.00	7.26	L
ATOM	882	CG	PRO	95	68.501	-13.546	21.027	1.00	7.26	L
ATOM	883	C	PRO	95	69.152	-10.883	22.247	1.00	29.48	L
ATOM	884	O	PRO	95	69.139	-11.600	23.264	1.00	7.26	L
ATOM	885	N	PRO	96	68.736	-9.608	22.272	1.00	29.50	L
ATOM	886	CD	PRO	96	68.549	-8.609	21.208	1.00	21.77	L
ATOM	887	CA	PRO	96	68.305	-9.092	23.576	1.00	29.50	L
ATOM	888	CB	PRO	96	68.248	-7.577	23.382	1.00	21.77	L
ATOM	889	CG	PRO	96	67.966	-7.412	21.942	1.00	21.77	L
ATOM	890	C	PRO	96	66.936	-9.686	23.752	1.00	29.50	L
ATOM	891	O	PRO	96	66.234	-9.902	22.769	1.00	21.77	L
ATOM	892	N	THR	97	66.560	-9.985	24.982	1.00	12.13	L
ATOM	893	H	THR	97	67.159	-9.831	25.739	1.00	0.00	L

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ATOM	894	CA	THR	97	65.261	-10.554	25.188	1.00	12.13	L
ATOM	895	CB	THR	97	65.350	-12.022	25.763	1.00	14.80	L
ATOM	896	OG1	THR	97	66.163	-12.076	26.944	1.00	14.80	L
ATOM	897	HG1	THR	97	65.725	-11.594	27.654	1.00	0.00	L
ATOM	898	CG2	THR	97	65.941	-12.916	24.741	1.00	14.80	L
ATOM	899	C	THR	97	64.481	-9.661	26.123	1.00	12.13	L
ATOM	900	O	THR	97	65.076	-8.849	26.866	1.00	14.80	L
ATOM	901	N	PHE	98	63.153	-9.784	26.067	1.00	11.95	L
ATOM	902	H	PHE	98	62.760	-10.414	25.422	1.00	0.00	L
ATOM	903	CA	PHE	98	62.322	-9.000	26.934	1.00	11.95	L
ATOM	904	CB	PHE	98	61.188	-8.334	26.191	1.00	13.77	L
ATOM	905	CG	PHE	98	61.612	-7.272	25.235	1.00	13.77	L
ATOM	906	CD1	PHE	98	61.991	-7.600	23.931	1.00	13.77	L
ATOM	907	CD2	PHE	98	61.465	-5.929	25.566	1.00	13.77	L
ATOM	908	CE1	PHE	98	62.188	-6.615	22.977	1.00	13.77	L
ATOM	909	CE2	PHE	98	61.664	-4.921	24.610	1.00	13.77	L
ATOM	910	CZ	PHE	98	62.016	-5.268	23.325	1.00	13.77	L
ATOM	911	C	PHE	98	61.781	-9.992	27.923	1.00	11.95	L
ATOM	912	O	PHE	98	61.909	-11.225	27.755	1.00	13.77	L
ATOM	913	N	GLY	99	61.203	-9.453	28.992	1.00	7.85	L
ATOM	914	H	GLY	99	61.153	-8.481	29.073	1.00	0.00	L
ATOM	915	CA	GLY	99	60.651	-10.306	30.022	1.00	7.85	L
ATOM	916	C	GLY	99	59.190	-10.344	29.734	1.00	7.85	L
ATOM	917	O	GLY	99	58.710	-9.549	28.960	1.00	19.99	L
ATOM	918	N	GLY	100	58.497	-11.263	30.365	1.00	20.03	L
ATOM	919	H	GLY	100	58.957	-11.868	30.995	1.00	0.00	L
ATOM	920	CA	GLY	100	57.071	-11.394	30.164	1.00	20.03	L
ATOM	921	C	GLY	100	56.106	-10.278	30.569	1.00	20.03	L
ATOM	922	O	GLY	100	54.894	-10.461	30.421	1.00	24.24	L
ATOM	923	N	GLY	101	56.589	-9.139	31.067	1.00	16.11	L
ATOM	924	H	GLY	101	57.553	-9.001	31.185	1.00	0.00	L
ATOM	925	CA	GLY	101	55.647	-8.101	31.454	1.00	16.11	L
ATOM	926	C	GLY	101	54.994	-8.309	32.814	1.00	16.11	L
ATOM	927	O	GLY	101	54.866	-9.414	33.326	1.00	6.34	L
ATOM	928	N	THR	102	54.613	-7.191	33.408	1.00	2.77	L
ATOM	929	H	THR	102	54.777	-6.347	32.941	1.00	0.00	L
ATOM	930	CA	THR	102	53.953	-7.136	34.707	1.00	2.77	L
ATOM	931	CB	THR	102	54.892	-6.585	35.862	1.00	19.70	L
ATOM	932	OG1	THR	102	55.725	-7.623	36.397	1.00	19.70	L
ATOM	933	HG1	THR	102	56.286	-7.983	35.705	1.00	0.00	L
ATOM	934	CG2	THR	102	54.047	-6.025	37.009	1.00	19.70	L
ATOM	935	C	THR	102	52.879	-6.086	34.468	1.00	2.77	L
ATOM	936	O	THR	102	53.180	-4.941	34.142	1.00	19.70	L
ATOM	937	N	LYS	103	51.626	-6.472	34.608	1.00	26.34	L
ATOM	938	H	LYS	103	51.385	-7.397	34.789	1.00	0.00	L
ATOM	939	CA	LYS	103	50.557	-5.513	34.457	1.00	26.34	L
ATOM	940	CB	LYS	103	49.279	-6.224	33.978	1.00	10.49	L
ATOM	941	CG	LYS	103	49.166	-6.299	32.451	1.00	10.49	L
ATOM	942	CD	LYS	103	48.439	-7.537	31.974	1.00	10.49	L
ATOM	943	CE	LYS	103	47.766	-7.226	30.655	1.00	10.49	L
ATOM	944	NZ	LYS	103	47.315	-8.431	29.862	1.00	10.49	L
ATOM	945	HZ1	LYS	103	46.866	-8.126	28.964	1.00	0.00	L
ATOM	946	HZ2	LYS	103	46.612	-8.973	30.416	1.00	0.00	L
ATOM	947	HZ3	LYS	103	48.119	-9.045	29.637	1.00	0.00	L
ATOM	948	C	LYS	103	50.328	-4.757	35.799	1.00	26.34	L
ATOM	949	O	LYS	103	50.231	-5.334	36.878	1.00	10.49	L

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ATOM	950	N	LEU	104	50.292	-3.439	35.723	1.00	19.87	L
ATOM	951	H	LEU	104	50.438	-2.985	34.861	1.00	0.00	L
ATOM	952	CA	LEU	104	50.028	-2.647	36.894	1.00	19.87	L
ATOM	953	CB	LEU	104	50.990	-1.476	36.951	1.00	18.52	L
ATOM	954	CG	LEU	104	50.548	-0.212	37.674	1.00	18.52	L
ATOM	955	CD1	LEU	104	51.200	-0.132	39.022	1.00	18.52	L
ATOM	956	CD2	LEU	104	50.951	1.002	36.842	1.00	18.52	L
ATOM	957	C	LEU	104	48.599	-2.135	36.763	1.00	19.87	L
ATOM	958	O	LEU	104	48.255	-1.500	35.783	1.00	18.52	L
ATOM	959	N	GLU	105	47.756	-2.445	37.732	1.00	14.13	L
ATOM	960	H	GLU	105	48.057	-3.001	38.476	1.00	0.00	L
ATOM	961	CA	GLU	105	46.395	-1.975	37.683	1.00	14.13	L
ATOM	962	CB	GLU	105	45.429	-3.143	37.855	1.00	34.30	L
ATOM	963	CG	GLU	105	45.934	-4.464	37.337	1.00	34.30	L
ATOM	964	CD	GLU	105	44.851	-5.534	37.336	1.00	34.30	L
ATOM	965	OE1	GLU	105	43.725	-5.217	37.782	1.00	34.30	L
ATOM	966	OE2	GLU	105	45.119	-6.685	36.899	1.00	34.30	L
ATOM	967	C	GLU	105	46.165	-0.920	38.780	1.00	14.13	L
ATOM	968	O	GLU	105	46.794	-0.981	39.837	1.00	34.30	L
ATOM	969	N	ILE	106	45.257	0.034	38.524	1.00	2.00	L
ATOM	970	H	ILE	106	44.773	0.026	37.673	1.00	0.00	L
ATOM	971	CA	ILE	106	44.977	1.083	39.485	1.00	2.00	L
ATOM	972	CB	ILE	106	44.938	2.403	38.839	1.00	7.09	L
ATOM	973	CG2	ILE	106	44.809	3.486	39.944	1.00	7.09	L
ATOM	974	CG1	ILE	106	46.139	2.559	37.918	1.00	7.09	L
ATOM	975	CD1	ILE	106	47.372	2.099	38.488	1.00	7.09	L
ATOM	976	C	ILE	106	43.732	1.037	40.343	1.00	2.00	L
ATOM	977	O	ILE	106	42.630	1.221	39.884	1.00	7.09	L
ATOM	978	N	LYS	107	43.933	0.837	41.627	1.00	32.75	L
ATOM	979	H	LYS	107	44.845	0.703	41.951	1.00	0.00	L
ATOM	980	CA	LYS	107	42.839	0.813	42.560	1.00	32.75	L
ATOM	981	CB	LYS	107	43.402	0.483	43.936	1.00	14.75	L
ATOM	982	CG	LYS	107	44.193	-0.814	43.860	1.00	14.75	L
ATOM	983	CD	LYS	107	44.037	-1.700	45.071	1.00	14.75	L
ATOM	984	CE	LYS	107	45.062	-1.390	46.163	1.00	14.75	L
ATOM	985	NZ	LYS	107	44.530	-1.639	47.539	1.00	14.75	L
ATOM	986	HZ1	LYS	107	43.828	-0.952	47.829	1.00	0.00	L
ATOM	987	HZ2	LYS	107	45.306	-1.706	48.226	1.00	0.00	L
ATOM	988	HZ3	LYS	107	44.074	-2.595	47.509	1.00	0.00	L
ATOM	989	C	LYS	107	42.214	2.224	42.421	1.00	32.75	L
ATOM	990	O	LYS	107	42.833	3.152	41.981	1.00	14.75	L
ATOM	991	N	ARG	108	41.007	2.435	42.804	1.00	2.00	L
ATOM	992	H	ARG	108	40.747	1.691	43.234	1.00	0.00	L
ATOM	993	CA	ARG	108	40.248	3.650	42.593	1.00	2.00	L
ATOM	994	CB	ARG	108	39.947	3.704	41.107	1.00	4.26	L
ATOM	995	CG	ARG	108	39.087	4.746	40.626	1.00	4.26	L
ATOM	996	CD	ARG	108	37.959	4.168	39.895	1.00	4.26	L
ATOM	997	NE	ARG	108	36.804	4.847	40.431	1.00	4.26	L
ATOM	998	HE	ARG	108	36.194	4.381	40.991	1.00	0.00	L
ATOM	999	CZ	ARG	108	36.506	6.121	40.156	1.00	4.26	L
ATOM	1000	NH1	ARG	108	37.298	6.814	39.338	1.00	4.26	L
ATOM	1001	HH11	ARG	108	38.134	7.233	39.701	1.00	0.00	L
ATOM	1002	HH12	ARG	108	37.051	6.934	38.380	1.00	0.00	L
ATOM	1003	NH2	ARG	108	35.455	6.702	40.725	1.00	4.26	L
ATOM	1004	HH21	ARG	108	35.486	6.912	41.700	1.00	0.00	L
ATOM	1005	HH22	ARG	108	34.669	6.969	40.175	1.00	0.00	L

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ATOM	1006	C	ARG	108	38.952	3.399	43.385	1.00	2.00	L
ATOM	1007	O	ARG	108	38.591	2.287	43.723	1.00	4.26	L
ATOM	1008	N	THR	109	38.223	4.429	43.667	1.00	4.52	L
ATOM	1009	H	THR	109	38.506	5.326	43.364	1.00	0.00	L
ATOM	1010	CA	THR	109	36.991	4.248	44.408	1.00	4.52	L
ATOM	1011	CB	THR	109	36.461	5.634	44.770	1.00	22.42	L
ATOM	1012	OG1	THR	109	37.125	6.097	45.948	1.00	22.42	L
ATOM	1013	HG1	THR	109	37.489	5.342	46.412	1.00	0.00	L
ATOM	1014	CG2	THR	109	34.999	5.624	44.974	1.00	22.42	L
ATOM	1015	C	THR	109	35.920	3.536	43.608	1.00	4.52	L
ATOM	1016	O	THR	109	35.888	3.605	42.372	1.00	22.42	L
ATOM	1017	N	VAL	110	34.984	2.914	44.309	1.00	9.69	L
ATOM	1018	H	VAL	110	35.022	2.926	45.293	1.00	0.00	L
ATOM	1019	CA	VAL	110	33.892	2.209	43.624	1.00	9.69	L
ATOM	1020	CB	VAL	110	33.008	1.414	44.664	1.00	9.78	L
ATOM	1021	CG1	VAL	110	31.614	1.167	44.122	1.00	9.78	L
ATOM	1022	CG2	VAL	110	33.648	0.107	44.984	1.00	9.78	L
ATOM	1023	C	VAL	110	33.056	3.245	42.876	1.00	9.69	L
ATOM	1024	O	VAL	110	32.916	4.344	43.346	1.00	9.78	L
ATOM	1025	N	ALA	111	32.517	2.906	41.709	1.00	9.88	L
ATOM	1026	H	ALA	111	32.680	2.007	41.368	1.00	0.00	L
ATOM	1027	CA	ALA	111	31.699	3.845	40.921	1.00	9.88	L
ATOM	1028	CB	ALA	111	32.580	4.700	40.052	1.00	12.47	L
ATOM	1029	C	ALA	111	30.681	3.117	40.049	1.00	9.88	L
ATOM	1030	O	ALA	111	31.034	2.222	39.278	1.00	12.47	L
ATOM	1031	N	ALA	112	29.419	3.533	40.177	1.00	15.14	L
ATOM	1032	H	ALA	112	29.243	4.287	40.779	1.00	0.00	L
ATOM	1033	CA	ALA	112	28.306	2.944	39.459	1.00	15.14	L
ATOM	1034	CB	ALA	112	27.013	3.322	40.151	1.00	14.29	L
ATOM	1035	C	ALA	112	28.262	3.366	37.982	1.00	15.14	L
ATOM	1036	O	ALA	112	28.493	4.496	37.661	1.00	14.29	L
ATOM	1037	N	PRO	113	27.921	2.455	37.076	1.00	2.00	L
ATOM	1038	CD	PRO	113	27.509	1.053	37.228	1.00	14.66	L
ATOM	1039	CA	PRO	113	27.888	2.861	35.691	1.00	2.00	L
ATOM	1040	CB	PRO	113	27.758	1.535	34.959	1.00	14.66	L
ATOM	1041	CG	PRO	113	27.020	0.700	35.871	1.00	14.66	L
ATOM	1042	C	PRO	113	26.767	3.802	35.307	1.00	2.00	L
ATOM	1043	O	PRO	113	25.791	3.928	35.999	1.00	14.66	L
ATOM	1044	N	SER	114	26.930	4.452	34.169	1.00	11.31	L
ATOM	1045	H	SER	114	27.775	4.338	33.679	1.00	0.00	L
ATOM	1046	CA	SER	114	25.900	5.319	33.602	1.00	11.31	L
ATOM	1047	CB	SER	114	26.483	6.645	33.211	1.00	21.44	L
ATOM	1048	OG	SER	114	26.625	7.399	34.396	1.00	21.44	L
ATOM	1049	HG	SER	114	26.649	6.799	35.136	1.00	0.00	L
ATOM	1050	C	SER	114	25.447	4.554	32.372	1.00	11.31	L
ATOM	1051	O	SER	114	26.150	4.488	31.365	1.00	21.44	L
ATOM	1052	N	VAL	115	24.264	3.969	32.484	1.00	13.77	L
ATOM	1053	H	VAL	115	23.749	4.145	33.297	1.00	0.00	L
ATOM	1054	CA	VAL	115	23.781	3.111	31.456	1.00	13.77	L
ATOM	1055	CB	VAL	115	23.148	1.928	32.143	1.00	7.06	L
ATOM	1056	CG1	VAL	115	22.408	2.428	33.293	1.00	7.06	L
ATOM	1057	CG2	VAL	115	22.300	1.166	31.214	1.00	7.06	L
ATOM	1058	C	VAL	115	22.912	3.713	30.355	1.00	13.77	L
ATOM	1059	O	VAL	115	21.821	4.200	30.582	1.00	7.06	L
ATOM	1060	N	PHE	116	23.437	3.660	29.143	1.00	3.49	L
ATOM	1061	H	PHE	116	24.320	3.250	29.040	1.00	0.00	L



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ATOM	1062	CA	PHE	116	22.787	4.176	27.978	1.00	3.49	L
ATOM	1063	CB	PHE	116	23.814	5.009	27.279	1.00	10.72	L
ATOM	1064	CG	PHE	116	24.348	6.115	28.142	1.00	10.72	L
ATOM	1065	CD1	PHE	116	23.711	7.317	28.213	1.00	10.72	L
ATOM	1066	CD2	PHE	116	25.543	5.987	28.819	1.00	10.72	L
ATOM	1067	CE1	PHE	116	24.256	8.360	28.922	1.00	10.72	L
ATOM	1068	CE2	PHE	116	26.073	7.037	29.527	1.00	10.72	L
ATOM	1069	CZ	PHE	116	25.424	8.219	29.570	1.00	10.72	L
ATOM	1070	C	PHE	116	22.257	3.039	27.078	1.00	3.49	L
ATOM	1071	O	PHE	116	22.917	2.009	26.918	1.00	10.72	L
ATOM	1072	N	ILE	117	21.078	3.204	26.499	1.00	2.00	L
ATOM	1073	H	ILE	117	20.595	4.045	26.673	1.00	0.00	L
ATOM	1074	CA	ILE	117	20.485	2.194	25.613	1.00	2.00	L
ATOM	1075	CB	ILE	117	19.102	1.702	26.212	1.00	22.08	L
ATOM	1076	CG2	ILE	117	17.936	2.564	25.763	1.00	22.08	L
ATOM	1077	CG1	ILE	117	18.833	0.280	25.769	1.00	22.08	L
ATOM	1078	CD1	ILE	117	18.648	0.171	24.327	1.00	22.08	L
ATOM	1079	C	ILE	117	20.353	2.749	24.164	1.00	2.00	L
ATOM	1080	O	ILE	117	19.985	3.902	23.975	1.00	22.08	L
ATOM	1081	N	PHE	118	20.678	1.941	23.149	1.00	17.15	L
ATOM	1082	H	PHE	118	20.928	1.025	23.364	1.00	0.00	L
ATOM	1083	CA	PHE	118	20.658	2.407	21.728	1.00	17.15	L
ATOM	1084	CB	PHE	118	22.082	2.465	21.135	1.00	2.00	L
ATOM	1085	CG	PHE	118	22.877	3.635	21.604	1.00	2.00	L
ATOM	1086	CD1	PHE	118	22.638	4.880	21.082	1.00	2.00	L
ATOM	1087	CD2	PHE	118	23.822	3.490	22.609	1.00	2.00	L
ATOM	1088	CE1	PHE	118	23.317	5.974	21.555	1.00	2.00	L
ATOM	1089	CE2	PHE	118	24.505	4.561	23.083	1.00	2.00	L
ATOM	1090	CZ	PHE	118	24.251	5.828	22.553	1.00	2.00	L
ATOM	1091	C	PHE	118	19.806	1.610	20.767	1.00	17.15	L
ATOM	1092	O	PHE	118	20.040	0.445	20.548	1.00	2.00	L
ATOM	1093	N	PRO	119	18.793	2.235	20.167	1.00	24.93	L
ATOM	1094	CD	PRO	119	18.228	3.601	20.256	1.00	3.24	L
ATOM	1095	CA	PRO	119	18.027	1.380	19.259	1.00	24.93	L
ATOM	1096	CB	PRO	119	16.682	2.073	19.179	1.00	3.24	L
ATOM	1097	CG	PRO	119	16.772	3.346	20.201	1.00	3.24	L
ATOM	1098	C	PRO	119	18.687	1.255	17.904	1.00	24.93	L
ATOM	1099	O	PRO	119	19.706	1.886	17.647	1.00	3.24	L
ATOM	1100	N	PRO	120	18.178	0.362	17.039	1.00	12.24	L
ATOM	1101	CD	PRO	120	17.129	-0.690	17.114	1.00	2.00	L
ATOM	1102	CA	PRO	120	18.863	0.323	15.767	1.00	12.24	L
ATOM	1103	CB	PRO	120	18.545	-1.057	15.242	1.00	2.00	L
ATOM	1104	CG	PRO	120	17.192	-1.364	15.737	1.00	2.00	L
ATOM	1105	C	PRO	120	18.504	1.417	14.757	1.00	12.24	L
ATOM	1106	O	PRO	120	17.395	1.980	14.658	1.00	2.00	L
ATOM	1107	N	SER	121	19.545	1.661	13.992	1.00	6.42	L
ATOM	1108	H	SER	121	20.333	1.143	14.235	1.00	0.00	L
ATOM	1109	CA	SER	121	19.639	2.581	12.891	1.00	6.42	L
ATOM	1110	CB	SER	121	21.033	2.356	12.307	1.00	10.39	L
ATOM	1111	OG	SER	121	21.687	1.305	13.069	1.00	10.39	L
ATOM	1112	HG	SER	121	22.131	1.703	13.832	1.00	0.00	L
ATOM	1113	C	SER	121	18.564	2.263	11.851	1.00	6.42	L
ATOM	1114	O	SER	121	18.475	1.144	11.383	1.00	10.39	L
ATOM	1115	N	ASP	122	17.736	3.229	11.496	1.00	24.43	L
ATOM	1116	H	ASP	122	17.796	4.112	11.931	1.00	0.00	L
ATOM	1117	CA	ASP	122	16.747	2.954	10.464	1.00	24.43	L

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ATOM	1118	CB	ASP	122	15.942	4.223	10.132	1.00	15.85	L
ATOM	1119	CG	ASP	122	14.661	4.360	10.984	1.00	15.85	L
ATOM	1120	OD1	ASP	122	14.372	3.450	11.779	1.00	15.85	L
ATOM	1121	OD2	ASP	122	13.937	5.387	10.851	1.00	15.85	L
ATOM	1122	C	ASP	122	17.581	2.463	9.265	1.00	24.43	L
ATOM	1123	O	ASP	122	17.251	1.486	8.590	1.00	15.85	L
ATOM	1124	N	GLU	123	18.688	3.140	9.023	1.00	7.32	L
ATOM	1125	H	GLU	123	18.909	3.926	9.575	1.00	0.00	L
ATOM	1126	CA	GLU	123	19.589	2.742	7.954	1.00	7.32	L
ATOM	1127	CB	GLU	123	20.954	3.437	8.127	1.00	28.08	L
ATOM	1128	CG	GLU	123	21.951	3.311	6.981	1.00	28.08	L
ATOM	1129	CD	GLU	123	23.239	4.131	7.247	1.00	28.08	L
ATOM	1130	OE1	GLU	123	24.286	3.912	6.548	1.00	28.08	L
ATOM	1131	OE2	GLU	123	23.196	5.005	8.160	1.00	28.08	L
ATOM	1132	C	GLU	123	19.762	1.233	8.061	1.00	7.32	L
ATOM	1133	O	GLU	123	19.262	0.465	7.222	1.00	28.08	L
ATOM	1134	N	GLN	124	20.469	0.805	9.103	1.00	19.71	L
ATOM	1135	H	GLN	124	20.836	1.433	9.749	1.00	0.00	L
ATOM	1136	CA	GLN	124	20.692	-0.618	9.280	1.00	19.71	L
ATOM	1137	CB	GLN	124	21.174	-0.891	10.687	1.00	17.69	L
ATOM	1138	CG	GLN	124	22.141	-1.986	10.771	1.00	17.69	L
ATOM	1139	CD	GLN	124	21.921	-2.850	11.968	1.00	17.69	L
ATOM	1140	OE1	GLN	124	21.275	-2.447	12.923	1.00	17.69	L
ATOM	1141	NE2	GLN	124	22.468	-4.054	11.933	1.00	17.69	L
ATOM	1142	HE21	GLN	124	23.369	-4.148	11.578	1.00	0.00	L
ATOM	1143	HE22	GLN	124	21.927	-4.805	12.270	1.00	0.00	L
ATOM	1144	C	GLN	124	19.451	-1.481	8.968	1.00	19.71	L
ATOM	1145	O	GLN	124	19.535	-2.430	8.158	1.00	17.69	L
ATOM	1146	N	LEU	125	18.316	-1.142	9.585	1.00	20.07	L
ATOM	1147	H	LEU	125	18.297	-0.368	10.178	1.00	0.00	L
ATOM	1148	CA	LEU	125	17.088	-1.893	9.403	1.00	20.07	L
ATOM	1149	CB	LEU	125	15.928	-1.092	9.943	1.00	5.27	L
ATOM	1150	CG	LEU	125	15.977	-1.130	11.452	1.00	5.27	L
ATOM	1151	CD1	LEU	125	14.840	-0.438	12.018	1.00	5.27	L
ATOM	1152	CD2	LEU	125	15.961	-2.535	11.895	1.00	5.27	L
ATOM	1153	C	LEU	125	16.837	-2.300	7.967	1.00	20.07	L
ATOM	1154	O	LEU	125	16.514	-3.462	7.677	1.00	5.27	L
ATOM	1155	N	LYS	126	17.023	-1.351	7.066	1.00	30.95	L
ATOM	1156	H	LYS	126	17.283	-0.463	7.373	1.00	0.00	L
ATOM	1157	CA	LYS	126	16.838	-1.581	5.640	1.00	30.95	L
ATOM	1158	CB	LYS	126	17.086	-0.257	4.902	1.00	51.57	L
ATOM	1159	CG	LYS	126	16.362	0.948	5.545	1.00	51.57	L
ATOM	1160	CD	LYS	126	15.197	0.511	6.493	1.00	51.57	L
ATOM	1161	CE	LYS	126	14.015	1.503	6.527	1.00	51.57	L
ATOM	1162	NZ	LYS	126	13.644	1.968	7.923	1.00	51.57	L
ATOM	1163	HZ1	LYS	126	12.957	2.748	7.832	1.00	0.00	L
ATOM	1164	HZ2	LYS	126	14.484	2.282	8.443	1.00	0.00	L
ATOM	1165	HZ3	LYS	126	13.181	1.168	8.404	1.00	0.00	L
ATOM	1166	C	LYS	126	17.748	-2.698	5.085	1.00	30.95	L
ATOM	1167	O	LYS	126	18.061	-2.736	3.879	1.00	51.57	L
ATOM	1168	N	SER	127	18.146	-3.613	5.965	1.00	32.50	L
ATOM	1169	H	SER	127	17.905	-3.620	6.895	1.00	0.00	L
ATOM	1170	CA	SER	127	19.025	-4.696	5.592	1.00	32.50	L
ATOM	1171	CB	SER	127	20.440	-4.166	5.654	1.00	20.03	L
ATOM	1172	OG	SER	127	20.651	-3.373	4.508	1.00	20.03	L
ATOM	1173	HG	SER	127	21.604	-3.219	4.429	1.00	0.00	L

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ATOM	1174	C	SER	127	18.933	-5.982	6.422	1.00	32.50	L
ATOM	1175	O	SER	127	19.897	-6.775	6.431	1.00	20.03	L
ATOM	1176	N	GLY	128	17.783	-6.225	7.060	1.00	17.70	L
ATOM	1177	H	GLY	128	17.029	-5.612	6.946	1.00	0.00	L
ATOM	1178	CA	GLY	128	17.688	-7.394	7.919	1.00	17.70	L
ATOM	1179	C	GLY	128	18.489	-6.780	9.030	1.00	17.70	L
ATOM	1180	O	GLY	128	18.194	-5.616	9.363	1.00	39.29	L
ATOM	1181	N	THR	129	19.501	-7.456	9.586	1.00	16.49	L
ATOM	1182	H	THR	129	19.693	-8.361	9.284	1.00	0.00	L
ATOM	1183	CA	THR	129	20.307	-6.827	10.649	1.00	16.49	L
ATOM	1184	CB	THR	129	21.541	-6.114	10.044	1.00	22.14	L
ATOM	1185	OG1	THR	129	21.126	-5.261	8.967	1.00	22.14	L
ATOM	1186	HG1	THR	129	20.258	-4.909	9.157	1.00	0.00	L
ATOM	1187	CG2	THR	129	22.536	-7.104	9.492	1.00	22.14	L
ATOM	1188	C	THR	129	19.561	-5.772	11.544	1.00	16.49	L
ATOM	1189	O	THR	129	19.179	-4.677	11.103	1.00	22.14	L
ATOM	1190	N	ALA	130	19.353	-6.123	12.803	1.00	26.82	L
ATOM	1191	H	ALA	130	19.643	-7.009	13.088	1.00	0.00	L
ATOM	1192	CA	ALA	130	18.726	-5.221	13.749	1.00	26.82	L
ATOM	1193	CB	ALA	130	17.343	-5.735	14.100	1.00	24.06	L
ATOM	1194	C	ALA	130	19.669	-5.207	14.979	1.00	26.82	L
ATOM	1195	O	ALA	130	19.734	-6.195	15.714	1.00	24.06	L
ATOM	1196	N	SER	131	20.423	-4.116	15.178	1.00	10.10	L
ATOM	1197	H	SER	131	20.339	-3.370	14.553	1.00	0.00	L
ATOM	1198	CA	SER	131	21.378	-4.018	16.300	1.00	10.10	L
ATOM	1199	CB	SER	131	22.787	-3.712	15.779	1.00	11.54	L
ATOM	1200	OG	SER	131	23.391	-4.840	15.178	1.00	11.54	L
ATOM	1201	HG	SER	131	23.005	-5.028	14.331	1.00	0.00	L
ATOM	1202	C	SER	131	21.053	-2.961	17.336	1.00	10.10	L
ATOM	1203	O	SER	131	21.054	-1.778	17.033	1.00	11.54	L
ATOM	1204	N	VAL	132	20.789	-3.376	18.564	1.00	14.94	L
ATOM	1205	H	VAL	132	20.775	-4.331	18.768	1.00	0.00	L
ATOM	1206	CA	VAL	132	20.519	-2.405	19.615	1.00	14.94	L
ATOM	1207	CB	VAL	132	19.156	-2.666	20.302	1.00	16.62	L
ATOM	1208	CG1	VAL	132	18.610	-3.995	19.875	1.00	16.62	L
ATOM	1209	CG2	VAL	132	19.269	-2.590	21.784	1.00	16.62	L
ATOM	1210	C	VAL	132	21.685	-2.476	20.601	1.00	14.94	L
ATOM	1211	O	VAL	132	22.001	-3.553	21.116	1.00	16.62	L
ATOM	1212	N	VAL	133	22.334	-1.324	20.837	1.00	5.40	L
ATOM	1213	H	VAL	133	22.005	-0.509	20.408	1.00	0.00	L
ATOM	1214	CA	VAL	133	23.511	-1.244	21.705	1.00	5.40	L
ATOM	1215	CB	VAL	133	24.591	-0.326	21.037	1.00	17.26	L
ATOM	1216	CG1	VAL	133	25.769	-0.073	21.968	1.00	17.26	L
ATOM	1217	CG2	VAL	133	25.070	-0.964	19.769	1.00	17.26	L
ATOM	1218	C	VAL	133	23.225	-0.779	23.114	1.00	5.40	L
ATOM	1219	O	VAL	133	22.381	0.065	23.322	1.00	17.26	L
ATOM	1220	N	CYS	134	23.935	-1.327	24.091	1.00	2.00	L
ATOM	1221	H	CYS	134	24.608	-2.000	23.877	1.00	0.00	L
ATOM	1222	CA	CYS	134	23.726	-0.929	25.472	1.00	2.00	L
ATOM	1223	C	CYS	134	25.052	-0.477	25.964	1.00	2.00	L
ATOM	1224	O	CYS	134	26.035	-1.175	25.756	1.00	18.14	L
ATOM	1225	CB	CYS	134	23.232	-2.092	26.358	1.00	18.14	L
ATOM	1226	SG	CYS	134	22.878	-1.484	28.058	1.00	18.14	L
ATOM	1227	N	LEU	135	25.081	0.696	26.590	1.00	6.88	L
ATOM	1228	H	LEU	135	24.261	1.174	26.678	1.00	0.00	L
ATOM	1229	CA	LEU	135	26.307	1.297	27.142	1.00	6.88	L

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ATOM	1230	CB	LEU	135	26.474	2.749	26.660	1.00	4.87	L
ATOM	1231	CG	LEU	135	27.734	3.310	25.985	1.00	4.87	L
ATOM	1232	CD1	LEU	135	27.836	4.796	26.220	1.00	4.87	L
ATOM	1233	CD2	LEU	135	28.935	2.601	26.485	1.00	4.87	L
ATOM	1234	C	LEU	135	26.233	1.357	28.669	1.00	6.88	L
ATOM	1235	O	LEU	135	25.149	1.584	29.201	1.00	4.87	L
ATOM	1236	N	LEU	136	27.371	1.135	29.336	1.00	13.05	L
ATOM	1237	H	LEU	136	28.162	0.884	28.816	1.00	0.00	L
ATOM	1238	CA	LEU	136	27.499	1.232	30.793	1.00	13.05	L
ATOM	1239	CB	LEU	136	27.707	-0.144	31.432	1.00	13.07	L
ATOM	1240	CG	LEU	136	26.508	-1.043	31.638	1.00	13.07	L
ATOM	1241	CD1	LEU	136	25.967	-1.390	30.305	1.00	13.07	L
ATOM	1242	CD2	LEU	136	26.888	-2.249	32.415	1.00	13.07	L
ATOM	1243	C	LEU	136	28.792	2.030	30.942	1.00	13.05	L
ATOM	1244	O	LEU	136	29.846	1.424	30.927	1.00	13.07	L
ATOM	1245	N	ASN	137	28.758	3.359	31.102	1.00	2.00	L
ATOM	1246	H	ASN	137	27.903	3.824	31.193	1.00	0.00	L
ATOM	1247	CA	ASN	137	30.011	4.110	31.142	1.00	2.00	L
ATOM	1248	CB	ASN	137	29.812	5.422	30.431	1.00	16.72	L
ATOM	1249	CG	ASN	137	30.652	5.529	29.191	1.00	16.72	L
ATOM	1250	OD1	ASN	137	31.744	6.074	29.199	1.00	16.72	L
ATOM	1251	ND2	ASN	137	30.151	4.995	28.114	1.00	16.72	L
ATOM	1252	HD21	ASN	137	29.537	4.244	28.213	1.00	0.00	L
ATOM	1253	HD22	ASN	137	30.413	5.380	27.251	1.00	0.00	L
ATOM	1254	C	ASN	137	30.748	4.369	32.433	1.00	2.00	L
ATOM	1255	O	ASN	137	30.148	4.621	33.439	1.00	16.72	L
ATOM	1256	N	ASN	138	32.081	4.307	32.378	1.00	2.00	L
ATOM	1257	H	ASN	138	32.491	4.096	31.520	1.00	0.00	L
ATOM	1258	CA	ASN	138	32.971	4.547	33.525	1.00	2.00	L
ATOM	1259	CB	ASN	138	33.248	6.009	33.692	1.00	17.34	L
ATOM	1260	CG	ASN	138	33.049	6.733	32.459	1.00	17.34	L
ATOM	1261	OD1	ASN	138	32.563	7.828	32.477	1.00	17.34	L
ATOM	1262	ND2	ASN	138	33.412	6.119	31.340	1.00	17.34	L
ATOM	1263	HD21	ASN	138	32.842	5.412	30.973	1.00	0.00	L
ATOM	1264	HD22	ASN	138	34.250	6.414	30.920	1.00	0.00	L
ATOM	1265	C	ASN	138	32.556	4.071	34.870	1.00	2.00	L
ATOM	1266	O	ASN	138	32.232	4.851	35.734	1.00	17.34	L
ATOM	1267	N	PHE	139	32.619	2.787	35.051	1.00	2.50	L
ATOM	1268	H	PHE	139	32.925	2.202	34.327	1.00	0.00	L
ATOM	1269	CA	PHE	139	32.248	2.243	36.291	1.00	2.50	L
ATOM	1270	CB	PHE	139	31.069	1.262	36.086	1.00	2.00	L
ATOM	1271	CG	PHE	139	31.333	0.149	35.103	1.00	2.00	L
ATOM	1272	CD1	PHE	139	30.939	0.275	33.788	1.00	2.00	L
ATOM	1273	CD2	PHE	139	31.924	-1.028	35.515	1.00	2.00	L
ATOM	1274	CE1	PHE	139	31.128	-0.758	32.875	1.00	2.00	L
ATOM	1275	CE2	PHE	139	32.124	-2.071	34.627	1.00	2.00	L
ATOM	1276	CZ	PHE	139	31.724	-1.936	33.285	1.00	2.00	L
ATOM	1277	C	PHE	139	33.487	1.555	36.831	1.00	2.50	L
ATOM	1278	O	PHE	139	34.483	1.413	36.138	1.00	2.00	L
ATOM	1279	N	TYR	140	33.398	1.124	38.085	1.00	24.08	L
ATOM	1280	H	TYR	140	32.555	1.257	38.572	1.00	0.00	L
ATOM	1281	CA	TYR	140	34.490	0.450	38.762	1.00	24.08	L
ATOM	1282	CB	TYR	140	35.579	1.436	39.083	1.00	9.88	L
ATOM	1283	CG	TYR	140	36.830	0.770	39.587	1.00	9.88	L
ATOM	1284	CD1	TYR	140	37.882	0.490	38.701	1.00	9.88	L
ATOM	1285	CE1	TYR	140	39.022	-0.117	39.113	1.00	9.88	L

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ATOM	1286	CD2 TYR	140	36.971	0.412	40.921	1.00	9.88	L
ATOM	1287	CE2 TYR	140	38.108	-0.200	41.349	1.00	9.88	L
ATOM	1288	CZ TYR	140	39.139	-0.467	40.430	1.00	9.88	L
ATOM	1289	OH TYR	140	40.286	-1.109	40.819	1.00	9.88	L
ATOM	1290	HH TYR	140	40.274	-1.259	41.765	1.00	0.00	L
ATOM	1291	C TYR	140	34.015	-0.150	40.065	1.00	24.08	L
ATOM	1292	O TYR	140	33.158	0.421	40.737	1.00	9.88	L
ATOM	1293	N PRO	141	34.508	-1.342	40.410	1.00	8.09	L
ATOM	1294	CD PRO	141	34.187	-2.018	41.665	1.00	5.02	L
ATOM	1295	CA PRO	141	35.452	-2.148	39.660	1.00	8.09	L
ATOM	1296	CB PRO	141	35.793	-3.268	40.614	1.00	5.02	L
ATOM	1297	CG PRO	141	34.598	-3.411	41.397	1.00	5.02	L
ATOM	1298	C PRO	141	34.753	-2.662	38.438	1.00	8.09	L
ATOM	1299	O PRO	141	33.621	-2.277	38.148	1.00	5.02	L
ATOM	1300	N ARG	142	35.423	-3.565	37.748	1.00	7.05	L
ATOM	1301	H ARG	142	36.279	-3.868	38.095	1.00	0.00	L
ATOM	1302	CA ARG	142	34.913	-4.125	36.511	1.00	7.05	L
ATOM	1303	CB ARG	142	36.056	-4.706	35.756	1.00	18.45	L
ATOM	1304	CG ARG	142	35.939	-4.448	34.364	1.00	18.45	L
ATOM	1305	CD ARG	142	36.341	-5.640	33.685	1.00	18.45	L
ATOM	1306	NE ARG	142	37.761	-5.814	33.865	1.00	18.45	L
ATOM	1307	HE ARG	142	38.211	-5.335	34.594	1.00	0.00	L
ATOM	1308	CZ ARG	142	38.493	-6.610	33.105	1.00	18.45	L
ATOM	1309	NH1 ARG	142	37.918	-7.314	32.106	1.00	18.45	L
ATOM	1310	HH11 ARG	142	37.920	-8.315	32.117	1.00	0.00	L
ATOM	1311	HH12 ARG	142	37.682	-6.844	31.256	1.00	0.00	L
ATOM	1312	NH2 ARG	142	39.794	-6.683	33.344	1.00	18.45	L
ATOM	1313	HH21 ARG	142	40.116	-7.494	33.848	1.00	0.00	L
ATOM	1314	HH22 ARG	142	40.415	-6.270	32.684	1.00	0.00	L
ATOM	1315	C ARG	142	33.771	-5.131	36.547	1.00	7.05	L
ATOM	1316	O ARG	142	32.932	-5.139	35.649	1.00	18.45	L
ATOM	1317	N GLU	143	33.718	-5.968	37.570	0.00	20.00	L
ATOM	1318	H GLU	143	34.416	-5.946	38.259	1.00	0.00	L
ATOM	1319	CA GLU	143	32.622	-6.920	37.649	0.00	20.00	L
ATOM	1320	CB GLU	143	32.559	-7.551	39.040	0.00	20.00	L
ATOM	1321	CG GLU	143	32.847	-6.580	40.172	0.00	20.00	L
ATOM	1322	CD GLU	143	33.163	-7.283	41.477	0.00	20.00	L
ATOM	1323	OE1 GLU	143	32.336	-7.208	42.409	0.00	20.00	L
ATOM	1324	OE2 GLU	143	34.239	-7.911	41.571	0.00	20.00	L
ATOM	1325	C GLU	143	31.314	-6.183	37.357	0.00	20.00	L
ATOM	1326	O GLU	143	30.890	-5.304	38.105	0.00	20.00	L
ATOM	1327	N ALA	144	30.694	-6.516	36.243	1.00	12.84	L
ATOM	1328	H ALA	144	31.096	-7.188	35.640	1.00	0.00	L
ATOM	1329	CA ALA	144	29.420	-5.898	35.874	1.00	12.84	L
ATOM	1330	CB ALA	144	29.685	-4.645	35.014	1.00	28.62	L
ATOM	1331	C ALA	144	28.617	-6.912	35.091	1.00	12.84	L
ATOM	1332	O ALA	144	29.207	-7.731	34.413	1.00	28.62	L
ATOM	1333	N LYS	145	27.289	-6.865	35.185	1.00	11.04	L
ATOM	1334	H LYS	145	26.882	-6.181	35.749	1.00	0.00	L
ATOM	1335	CA LYS	145	26.392	-7.793	34.457	1.00	11.04	L
ATOM	1336	CB LYS	145	25.745	-8.773	35.431	1.00	17.90	L
ATOM	1337	CG LYS	145	25.643	-10.222	34.955	1.00	17.90	L
ATOM	1338	CD LYS	145	24.229	-10.590	34.441	1.00	17.90	L
ATOM	1339	CE LYS	145	24.169	-11.888	33.537	1.00	17.90	L
ATOM	1340	NZ LYS	145	22.777	-12.494	33.336	1.00	17.90	L
ATOM	1341	HZ1 LYS	145	22.866	-13.505	33.116	1.00	0.00	L

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ATOM	1342	HZ2	LYS	145	22.310	-12.007	32.545	1.00	0.00	L
ATOM	1343	HZ3	LYS	145	22.218	-12.362	34.203	1.00	0.00	L
ATOM	1344	C	LYS	145	25.286	-7.075	33.649	1.00	11.04	L
ATOM	1345	O	LYS	145	24.666	-6.154	34.130	1.00	17.90	L
ATOM	1346	N	VAL	146	25.047	-7.516	32.416	1.00	3.15	L
ATOM	1347	H	VAL	146	25.572	-8.263	32.075	1.00	0.00	L
ATOM	1348	CA	VAL	146	24.042	-6.942	31.543	1.00	3.15	L
ATOM	1349	CB	VAL	146	24.645	-6.459	30.201	1.00	8.90	L
ATOM	1350	CG1	VAL	146	23.566	-5.872	29.307	1.00	8.90	L
ATOM	1351	CG2	VAL	146	25.754	-5.448	30.447	1.00	8.90	L
ATOM	1352	C	VAL	146	23.123	-8.076	31.207	1.00	3.15	L
ATOM	1353	O	VAL	146	23.563	-9.193	30.999	1.00	8.90	L
ATOM	1354	N	GLN	147	21.831	-7.798	31.160	1.00	7.60	L
ATOM	1355	H	GLN	147	21.530	-6.902	31.378	1.00	0.00	L
ATOM	1356	CA	GLN	147	20.855	-8.792	30.794	1.00	7.60	L
ATOM	1357	CB	GLN	147	20.001	-9.190	32.003	1.00	18.03	L
ATOM	1358	CG	GLN	147	19.905	-10.692	32.282	1.00	18.03	L
ATOM	1359	CD	GLN	147	19.984	-11.001	33.776	1.00	18.03	L
ATOM	1360	OE1	GLN	147	20.937	-10.629	34.437	1.00	18.03	L
ATOM	1361	NE2	GLN	147	18.972	-11.669	34.304	1.00	18.03	L
ATOM	1362	HE21	GLN	147	18.318	-11.163	34.823	1.00	0.00	L
ATOM	1363	HE22	GLN	147	18.938	-12.639	34.146	1.00	0.00	L
ATOM	1364	C	GLN	147	20.009	-8.065	29.760	1.00	7.60	L
ATOM	1365	O	GLN	147	19.645	-6.908	29.943	1.00	18.03	L
ATOM	1366	N	TRP	148	19.733	-8.750	28.663	1.00	14.46	L
ATOM	1367	H	TRP	148	20.101	-9.650	28.544	1.00	0.00	L
ATOM	1368	CA	TRP	148	18.903	-8.200	27.628	1.00	14.46	L
ATOM	1369	CB	TRP	148	19.450	-8.527	26.260	1.00	2.49	L
ATOM	1370	CG	TRP	148	20.476	-7.595	25.842	1.00	2.49	L
ATOM	1371	CD2	TRP	148	20.284	-6.288	25.354	1.00	2.49	L
ATOM	1372	CE2	TRP	148	21.544	-5.777	25.043	1.00	2.49	L
ATOM	1373	CE3	TRP	148	19.169	-5.488	25.150	1.00	2.49	L
ATOM	1374	CD1	TRP	148	21.802	-7.823	25.817	1.00	2.49	L
ATOM	1375	NE1	TRP	148	22.462	-6.746	25.337	1.00	2.49	L
ATOM	1376	HE1	TRP	148	23.434	-6.681	25.206	1.00	0.00	L
ATOM	1377	CZ2	TRP	148	21.725	-4.493	24.528	1.00	2.49	L
ATOM	1378	CZ3	TRP	148	19.349	-4.216	24.643	1.00	2.49	L
ATOM	1379	CH2	TRP	148	20.617	-3.737	24.339	1.00	2.49	L
ATOM	1380	C	TRP	148	17.535	-8.797	27.736	1.00	14.46	L
ATOM	1381	O	TRP	148	17.409	-9.998	27.735	1.00	2.49	L
ATOM	1382	N	LYS	149	16.507	-7.958	27.833	1.00	4.98	L
ATOM	1383	H	LYS	149	16.666	-6.990	27.869	1.00	0.00	L
ATOM	1384	CA	LYS	149	15.146	-8.435	27.885	1.00	4.98	L
ATOM	1385	CB	LYS	149	14.571	-8.173	29.269	1.00	7.57	L
ATOM	1386	CG	LYS	149	15.513	-8.660	30.336	1.00	7.57	L
ATOM	1387	CD	LYS	149	14.818	-9.421	31.410	1.00	7.57	L
ATOM	1388	CE	LYS	149	14.342	-8.470	32.477	1.00	7.57	L
ATOM	1389	NZ	LYS	149	15.159	-8.510	33.746	1.00	7.57	L
ATOM	1390	HZ1	LYS	149	15.556	-9.465	33.884	1.00	0.00	L
ATOM	1391	HZ2	LYS	149	14.555	-8.266	34.549	1.00	0.00	L
ATOM	1392	HZ3	LYS	149	15.934	-7.812	33.674	1.00	0.00	L
ATOM	1393	C	LYS	149	14.306	-7.802	26.784	1.00	4.98	L
ATOM	1394	O	LYS	149	14.103	-6.611	26.772	1.00	7.57	L
ATOM	1395	N	VAL	150	13.862	-8.616	25.839	1.00	2.00	L
ATOM	1396	H	VAL	150	14.132	-9.567	25.852	1.00	0.00	L
ATOM	1397	CA	VAL	150	12.985	-8.149	24.780	1.00	2.00	L

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ATOM	1398	CB VAL	150	13.153	-8.896	23.483	1.00	9.10	L
ATOM	1399	CG1 VAL	150	12.102	-8.406	22.531	1.00	9.10	L
ATOM	1400	CG2 VAL	150	14.501	-8.608	22.923	1.00	9.10	L
ATOM	1401	C VAL	150	11.574	-8.356	25.324	1.00	2.00	L
ATOM	1402	O VAL	150	11.298	-9.371	25.997	1.00	9.10	L
ATOM	1403	N ASP	151	10.683	-7.398	25.045	1.00	27.28	L
ATOM	1404	H ASP	151	10.905	-6.706	24.399	1.00	0.00	L
ATOM	1405	CA ASP	151	9.379	-7.415	25.699	1.00	27.28	L
ATOM	1406	CB ASP	151	8.452	-8.474	25.111	1.00	18.53	L
ATOM	1407	CG ASP	151	7.789	-7.984	23.817	1.00	18.53	L
ATOM	1408	OD1 ASP	151	7.706	-6.752	23.662	1.00	18.53	L
ATOM	1409	OD2 ASP	151	7.377	-8.802	22.957	1.00	18.53	L
ATOM	1410	C ASP	151	9.814	-7.704	27.152	1.00	27.28	L
ATOM	1411	O ASP	151	10.677	-6.966	27.687	1.00	18.53	L
ATOM	1412	N ASN	152	9.317	-8.739	27.806	1.00	24.23	L
ATOM	1413	H ASN	152	8.668	-9.351	27.407	1.00	0.00	L
ATOM	1414	CA ASN	152	9.796	-8.922	29.180	1.00	24.23	L
ATOM	1415	CB ASN	152	8.625	-9.019	30.144	1.00	31.42	L
ATOM	1416	CG ASN	152	8.540	-7.829	31.070	1.00	31.42	L
ATOM	1417	OD1 ASN	152	9.556	-7.343	31.576	1.00	31.42	L
ATOM	1418	ND2 ASN	152	7.320	-7.346	31.303	1.00	31.42	L
ATOM	1419	HD21 ASN	152	6.811	-6.960	30.543	1.00	0.00	L
ATOM	1420	HD22 ASN	152	6.993	-7.398	32.210	1.00	0.00	L
ATOM	1421	C ASN	152	10.669	-10.150	29.395	1.00	24.23	L
ATOM	1422	O ASN	152	10.982	-10.495	30.542	1.00	31.42	L
ATOM	1423	N ALA	153	11.071	-10.778	28.287	1.00	12.91	L
ATOM	1424	H ALA	153	10.852	-10.385	27.425	1.00	0.00	L
ATOM	1425	CA ALA	153	11.803	-12.013	28.322	1.00	12.91	L
ATOM	1426	CB ALA	153	11.399	-12.846	27.130	1.00	22.36	L
ATOM	1427	C ALA	153	13.305	-11.859	28.366	1.00	12.91	L
ATOM	1428	O ALA	153	13.868	-11.025	27.679	1.00	22.36	L
ATOM	1429	N LEU	154	13.934	-12.703	29.178	1.00	17.56	L
ATOM	1430	H LEU	154	13.381	-13.339	29.680	1.00	0.00	L
ATOM	1431	CA LEU	154	15.361	-12.729	29.351	1.00	17.56	L
ATOM	1432	CB LEU	154	15.661	-13.493	30.630	1.00	25.88	L
ATOM	1433	CG LEU	154	17.148	-13.556	30.940	1.00	25.88	L
ATOM	1434	CD1 LEU	154	17.856	-14.556	29.976	1.00	25.88	L
ATOM	1435	CD2 LEU	154	17.754	-12.124	30.818	1.00	25.88	L
ATOM	1436	C LEU	154	16.000	-13.426	28.122	1.00	17.56	L
ATOM	1437	O LEU	154	15.797	-14.626	27.915	1.00	25.88	L
ATOM	1438	N GLN	155	16.786	-12.702	27.319	1.00	10.46	L
ATOM	1439	H GLN	155	16.955	-11.770	27.534	1.00	0.00	L
ATOM	1440	CA GLN	155	17.371	-13.300	26.131	1.00	10.46	L
ATOM	1441	CB GLN	155	17.816	-12.219	25.188	1.00	15.40	L
ATOM	1442	CG GLN	155	16.765	-11.233	24.923	1.00	15.40	L
ATOM	1443	CD GLN	155	15.610	-11.812	24.148	1.00	15.40	L
ATOM	1444	OE1 GLN	155	14.483	-11.918	24.672	1.00	15.40	L
ATOM	1445	NE2 GLN	155	15.869	-12.181	22.890	1.00	15.40	L
ATOM	1446	HE21 GLN	155	16.408	-12.991	22.741	1.00	0.00	L
ATOM	1447	HE22 GLN	155	15.520	-11.624	22.166	1.00	0.00	L
ATOM	1448	C GLN	155	18.522	-14.259	26.381	1.00	10.46	L
ATOM	1449	O GLN	155	19.105	-14.275	27.478	1.00	15.40	L
ATOM	1450	N SER	156	18.853	-15.060	25.358	1.00	17.03	L
ATOM	1451	H SER	156	18.363	-14.991	24.509	1.00	0.00	L
ATOM	1452	CA SER	156	19.923	-16.032	25.487	1.00	17.03	L
ATOM	1453	CB SER	156	19.299	-17.401	25.664	1.00	29.40	L

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ATOM	1454	OG	SER	156	18.573	-17.426	26.874	1.00	29.40	L
ATOM	1455	HG	SER	156	18.337	-18.330	27.097	1.00	0.00	L
ATOM	1456	C	SER	156	21.127	-16.142	24.512	1.00	17.03	L
ATOM	1457	O	SER	156	22.262	-16.147	24.966	1.00	29.40	L
ATOM	1458	N	GLY	157	20.944	-16.267	23.214	0.00	20.00	L
ATOM	1459	H	GLY	157	20.054	-16.287	22.808	1.00	0.00	L
ATOM	1460	CA	GLY	157	22.153	-16.389	22.419	0.00	20.00	L
ATOM	1461	C	GLY	157	22.330	-15.359	21.331	0.00	20.00	L
ATOM	1462	O	GLY	157	22.919	-15.670	20.300	0.00	20.00	L
ATOM	1463	N	ASN	158	21.844	-14.140	21.562	0.00	20.00	L
ATOM	1464	H	ASN	158	21.422	-13.937	22.422	1.00	0.00	L
ATOM	1465	CA	ASN	158	21.917	-13.083	20.563	0.00	20.00	L
ATOM	1466	CB	ASN	158	20.509	-12.854	20.013	0.00	20.00	L
ATOM	1467	CG	ASN	158	20.071	-13.971	19.074	0.00	20.00	L
ATOM	1468	OD1	ASN	158	20.210	-15.158	19.390	0.00	20.00	L
ATOM	1469	ND2	ASN	158	19.551	-13.595	17.907	0.00	20.00	L
ATOM	1470	HD21	ASN	158	18.575	-13.545	17.835	1.00	0.00	L
ATOM	1471	HD22	ASN	158	20.162	-13.383	17.168	1.00	0.00	L
ATOM	1472	C	ASN	158	22.536	-11.768	21.042	0.00	20.00	L
ATOM	1473	O	ASN	158	22.091	-10.684	20.662	0.00	20.00	L
ATOM	1474	N	SER	159	23.579	-11.883	21.862	0.00	20.00	L
ATOM	1475	H	SER	159	23.884	-12.781	22.106	1.00	0.00	L
ATOM	1476	CA	SER	159	24.290	-10.730	22.414	0.00	20.00	L
ATOM	1477	CB	SER	159	23.801	-10.433	23.835	0.00	20.00	L
ATOM	1478	OG	SER	159	24.870	-10.561	24.762	0.00	20.00	L
ATOM	1479	HG	SER	159	25.379	-9.749	24.776	1.00	0.00	L
ATOM	1480	C	SER	159	25.802	-10.967	22.468	0.00	20.00	L
ATOM	1481	O	SER	159	26.263	-12.092	22.598	0.00	20.00	L
ATOM	1482	N	GLN	160	26.546	-9.876	22.376	1.00	9.54	L
ATOM	1483	H	GLN	160	26.088	-9.021	22.259	1.00	0.00	L
ATOM	1484	CA	GLN	160	28.021	-9.805	22.432	1.00	9.54	L
ATOM	1485	CB	GLN	160	28.622	-9.645	21.054	1.00	14.62	L
ATOM	1486	CG	GLN	160	28.289	-10.713	20.106	1.00	14.62	L
ATOM	1487	CD	GLN	160	29.473	-11.560	19.873	1.00	14.62	L
ATOM	1488	OE1	GLN	160	29.921	-11.684	18.742	1.00	14.62	L
ATOM	1489	NE2	GLN	160	30.022	-12.155	20.966	1.00	14.62	L
ATOM	1490	HE21	GLN	160	30.805	-12.724	20.863	1.00	0.00	L
ATOM	1491	HE22	GLN	160	29.593	-11.991	21.843	1.00	0.00	L
ATOM	1492	C	GLN	160	28.459	-8.542	23.198	1.00	9.54	L
ATOM	1493	O	GLN	160	27.821	-7.491	23.085	1.00	14.62	L
ATOM	1494	N	GLU	161	29.537	-8.651	23.969	1.00	2.00	L
ATOM	1495	H	GLU	161	29.998	-9.513	24.045	1.00	0.00	L
ATOM	1496	CA	GLU	161	30.047	-7.508	24.704	1.00	2.00	L
ATOM	1497	CB	GLU	161	29.424	-7.395	26.049	1.00	6.51	L
ATOM	1498	CG	GLU	161	29.447	-8.654	26.757	1.00	6.51	L
ATOM	1499	CD	GLU	161	29.459	-8.450	28.227	1.00	6.51	L
ATOM	1500	OE1	GLU	161	30.552	-8.648	28.769	1.00	6.51	L
ATOM	1501	OE2	GLU	161	28.406	-8.090	28.821	1.00	6.51	L
ATOM	1502	C	GLU	161	31.543	-7.474	24.868	1.00	2.00	L
ATOM	1503	O	GLU	161	32.239	-8.452	24.653	1.00	6.51	L
ATOM	1504	N	SER	162	32.043	-6.286	25.167	1.00	2.00	L
ATOM	1505	H	SER	162	31.441	-5.511	25.245	1.00	0.00	L
ATOM	1506	CA	SER	162	33.453	-6.099	25.370	1.00	2.00	L
ATOM	1507	CB	SER	162	34.131	-5.850	24.023	1.00	11.42	L
ATOM	1508	OG	SER	162	34.526	-4.526	23.859	1.00	11.42	L
ATOM	1509	HG	SER	162	34.326	-4.252	22.958	1.00	0.00	L



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ATOM	1510	C	SER	162	33.617	-4.940	26.330	1.00	2.00	L
ATOM	1511	O	SER	162	32.715	-4.092	26.483	1.00	11.42	L
ATOM	1512	N	VAL	163	34.731	-4.966	27.047	1.00	10.12	L
ATOM	1513	H	VAL	163	35.382	-5.689	26.915	1.00	0.00	L
ATOM	1514	CA	VAL	163	35.017	-3.968	28.042	1.00	10.12	L
ATOM	1515	CB	VAL	163	35.213	-4.582	29.430	1.00	8.50	L
ATOM	1516	CG1	VAL	163	36.570	-5.080	29.587	1.00	8.50	L
ATOM	1517	CG2	VAL	163	34.991	-3.551	30.457	1.00	8.50	L
ATOM	1518	C	VAL	163	36.253	-3.209	27.666	1.00	10.12	L
ATOM	1519	O	VAL	163	37.071	-3.695	26.914	1.00	8.50	L
ATOM	1520	N	THR	164	36.380	-1.995	28.172	1.00	4.54	L
ATOM	1521	H	THR	164	35.680	-1.631	28.759	1.00	0.00	L
ATOM	1522	CA	THR	164	37.540	-1.192	27.874	1.00	4.54	L
ATOM	1523	CB	THR	164	37.235	0.267	28.022	1.00	2.08	L
ATOM	1524	OG1	THR	164	36.639	0.528	29.296	1.00	2.08	L
ATOM	1525	HG1	THR	164	37.336	0.827	29.894	1.00	0.00	L
ATOM	1526	CG2	THR	164	36.317	0.659	26.999	1.00	2.08	L
ATOM	1527	C	THR	164	38.649	-1.504	28.826	1.00	4.54	L
ATOM	1528	O	THR	164	38.461	-2.148	29.828	1.00	2.08	L
ATOM	1529	N	GLU	165	39.832	-1.061	28.468	1.00	9.06	L
ATOM	1530	H	GLU	165	39.924	-0.637	27.594	1.00	0.00	L
ATOM	1531	CA	GLU	165	41.016	-1.177	29.303	1.00	9.06	L
ATOM	1532	CB	GLU	165	42.228	-0.939	28.428	1.00	41.70	L
ATOM	1533	CG	GLU	165	43.541	-1.199	29.070	1.00	41.70	L
ATOM	1534	CD	GLU	165	44.013	-2.619	28.831	1.00	41.70	L
ATOM	1535	OE1	GLU	165	43.162	-3.379	28.293	1.00	41.70	L
ATOM	1536	OE2	GLU	165	45.201	-2.967	29.172	1.00	41.70	L
ATOM	1537	C	GLU	165	40.777	0.019	30.227	1.00	9.06	L
ATOM	1538	O	GLU	165	39.959	0.902	29.937	1.00	41.70	L
ATOM	1539	N	GLN	166	41.455	0.055	31.350	1.00	9.20	L
ATOM	1540	H	GLN	166	42.092	-0.653	31.570	1.00	0.00	L
ATOM	1541	CA	GLN	166	41.257	1.153	32.281	1.00	9.20	L
ATOM	1542	CB	GLN	166	42.145	0.962	33.467	1.00	10.66	L
ATOM	1543	CG	GLN	166	41.459	0.289	34.548	1.00	10.66	L
ATOM	1544	CD	GLN	166	42.147	0.521	35.819	1.00	10.66	L
ATOM	1545	OE1	GLN	166	43.265	0.048	36.030	1.00	10.66	L
ATOM	1546	NE2	GLN	166	41.507	1.262	36.689	1.00	10.66	L
ATOM	1547	HE21	GLN	166	40.801	0.850	37.229	1.00	0.00	L
ATOM	1548	HE22	GLN	166	41.758	2.210	36.773	1.00	0.00	L
ATOM	1549	C	GLN	166	41.529	2.538	31.734	1.00	9.20	L
ATOM	1550	O	GLN	166	42.552	2.766	31.065	1.00	10.66	L
ATOM	1551	N	ASP	167	40.639	3.476	32.052	1.00	5.36	L
ATOM	1552	H	ASP	167	39.854	3.245	32.572	1.00	0.00	L
ATOM	1553	CA	ASP	167	40.853	4.845	31.606	1.00	5.36	L
ATOM	1554	CB	ASP	167	39.712	5.753	32.038	1.00	10.40	L
ATOM	1555	CG	ASP	167	39.784	7.140	31.412	1.00	10.40	L
ATOM	1556	OD1	ASP	167	39.745	7.260	30.147	1.00	10.40	L
ATOM	1557	OD2	ASP	167	39.875	8.124	32.182	1.00	10.40	L
ATOM	1558	C	ASP	167	42.171	5.381	32.167	1.00	5.36	L
ATOM	1559	O	ASP	167	42.659	4.998	33.234	1.00	10.40	L
ATOM	1560	N	SER	168	42.732	6.291	31.412	1.00	25.23	L
ATOM	1561	H	SER	168	42.273	6.552	30.582	1.00	0.00	L
ATOM	1562	CA	SER	168	43.987	6.941	31.745	1.00	25.23	L
ATOM	1563	CB	SER	168	44.571	7.513	30.436	1.00	36.81	L
ATOM	1564	OG	SER	168	43.542	7.607	29.428	1.00	36.81	L
ATOM	1565	HG	SER	168	43.517	8.502	29.077	1.00	0.00	L

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ATOM	1566	C	SER	168	43.767	8.073	32.768	1.00	25.23	L
ATOM	1567	O	SER	168	44.631	8.347	33.585	1.00	36.81	L
ATOM	1568	N	LYS	169	42.593	8.701	32.674	1.00	17.08	L
ATOM	1569	H	LYS	169	41.964	8.374	31.981	1.00	0.00	L
ATOM	1570	CA	LYS	169	42.165	9.815	33.498	1.00	17.08	L
ATOM	1571	CB	LYS	169	41.207	10.676	32.661	1.00	34.03	L
ATOM	1572	CG	LYS	169	41.880	11.722	31.754	1.00	34.03	L
ATOM	1573	CD	LYS	169	41.436	11.612	30.270	1.00	34.03	L
ATOM	1574	CE	LYS	169	40.079	10.793	30.040	1.00	34.03	L
ATOM	1575	NZ	LYS	169	39.629	10.490	28.599	1.00	34.03	L
ATOM	1576	HZ1	LYS	169	39.731	9.461	28.435	1.00	0.00	L
ATOM	1577	HZ2	LYS	169	40.214	10.996	27.904	1.00	0.00	L
ATOM	1578	HZ3	LYS	169	38.625	10.734	28.456	1.00	0.00	L
ATOM	1579	C	LYS	169	41.488	9.480	34.864	1.00	17.08	L
ATOM	1580	O	LYS	169	41.840	10.079	35.878	1.00	34.03	L
ATOM	1581	N	ASP	170	40.516	8.546	34.871	1.00	7.40	L
ATOM	1582	H	ASP	170	40.295	8.087	34.037	1.00	0.00	L
ATOM	1583	CA	ASP	170	39.744	8.173	36.084	1.00	7.40	L
ATOM	1584	CB	ASP	170	38.273	8.519	35.865	1.00	14.75	L
ATOM	1585	CG	ASP	170	37.676	7.785	34.676	1.00	14.75	L
ATOM	1586	OD1	ASP	170	38.369	6.881	34.229	1.00	14.75	L
ATOM	1587	OD2	ASP	170	36.569	8.095	34.193	1.00	14.75	L
ATOM	1588	C	ASP	170	39.789	6.735	36.554	1.00	7.40	L
ATOM	1589	O	ASP	170	39.139	6.371	37.509	1.00	14.75	L
ATOM	1590	N	SER	171	40.516	5.904	35.846	1.00	13.37	L
ATOM	1591	H	SER	171	40.990	6.241	35.048	1.00	0.00	L
ATOM	1592	CA	SER	171	40.645	4.507	36.241	1.00	13.37	L
ATOM	1593	CB	SER	171	41.218	4.446	37.680	1.00	22.93	L
ATOM	1594	OG	SER	171	42.349	5.301	37.825	1.00	22.93	L
ATOM	1595	HG	SER	171	42.059	6.210	37.918	1.00	0.00	L
ATOM	1596	C	SER	171	39.394	3.601	36.120	1.00	13.37	L
ATOM	1597	O	SER	171	39.395	2.437	36.524	1.00	22.93	L
ATOM	1598	N	THR	172	38.336	4.131	35.530	1.00	18.25	L
ATOM	1599	H	THR	172	38.395	5.059	35.213	1.00	0.00	L
ATOM	1600	CA	THR	172	37.098	3.387	35.355	1.00	18.25	L
ATOM	1601	CB	THR	172	35.917	4.361	35.221	1.00	9.35	L
ATOM	1602	OG1	THR	172	36.094	5.120	34.034	1.00	9.35	L
ATOM	1603	HG1	THR	172	36.526	4.577	33.367	1.00	0.00	L
ATOM	1604	CG2	THR	172	35.856	5.334	36.388	1.00	9.35	L
ATOM	1605	C	THR	172	37.128	2.480	34.124	1.00	18.25	L
ATOM	1606	O	THR	172	38.089	2.445	33.388	1.00	9.35	L
ATOM	1607	N	TYR	173	36.061	1.731	33.923	1.00	8.71	L
ATOM	1608	H	TYR	173	35.317	1.785	34.577	1.00	0.00	L
ATOM	1609	CA	TYR	173	35.956	0.831	32.794	1.00	8.71	L
ATOM	1610	CB	TYR	173	35.692	-0.614	33.244	1.00	8.14	L
ATOM	1611	CG	TYR	173	36.872	-1.190	33.932	1.00	8.14	L
ATOM	1612	CD1	TYR	173	37.960	-1.602	33.208	1.00	8.14	L
ATOM	1613	CE1	TYR	173	39.061	-2.125	33.832	1.00	8.14	L
ATOM	1614	CD2	TYR	173	36.915	-1.303	35.329	1.00	8.14	L
ATOM	1615	CE2	TYR	173	38.016	-1.827	35.960	1.00	8.14	L
ATOM	1616	CZ	TYR	173	39.089	-2.248	35.202	1.00	8.14	L
ATOM	1617	OH	TYR	173	40.168	-2.862	35.800	1.00	8.14	L
ATOM	1618	HH	TYR	173	39.933	-3.077	36.713	1.00	0.00	L
ATOM	1619	C	TYR	173	34.781	1.310	32.017	1.00	8.71	L
ATOM	1620	O	TYR	173	34.196	2.323	32.378	1.00	8.14	L
ATOM	1621	N	SER	174	34.450	0.597	30.942	1.00	2.10	L

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ATOM	1622	H	SER	174	35.002	-0.191	30.725	1.00	0.00	L
ATOM	1623	CA	SER	174	33.309	0.905	30.115	1.00	2.10	L
ATOM	1624	CB	SER	174	33.678	1.993	29.135	1.00	2.27	L
ATOM	1625	OG	SER	174	32.973	3.164	29.424	1.00	2.27	L
ATOM	1626	HG	SER	174	32.028	2.963	29.420	1.00	0.00	L
ATOM	1627	C	SER	174	32.955	-0.395	29.399	1.00	2.10	L
ATOM	1628	O	SER	174	33.833	-1.174	29.110	1.00	2.27	L
ATOM	1629	N	LEU	175	31.675	-0.613	29.124	1.00	11.98	L
ATOM	1630	H	LEU	175	31.006	0.063	29.357	1.00	0.00	L
ATOM	1631	CA	LEU	175	31.252	-1.830	28.485	1.00	11.98	L
ATOM	1632	CB	LEU	175	30.816	-2.851	29.561	1.00	8.34	L
ATOM	1633	CG	LEU	175	29.743	-3.982	29.501	1.00	8.34	L
ATOM	1634	CD1	LEU	175	28.663	-3.746	28.540	1.00	8.34	L
ATOM	1635	CD2	LEU	175	30.393	-5.229	29.176	1.00	8.34	L
ATOM	1636	C	LEU	175	30.132	-1.598	27.504	1.00	11.98	L
ATOM	1637	O	LEU	175	29.162	-0.906	27.822	1.00	8.34	L
ATOM	1638	N	SER	176	30.278	-2.228	26.337	1.00	11.37	L
ATOM	1639	H	SER	176	31.085	-2.758	26.196	1.00	0.00	L
ATOM	1640	CA	SER	176	29.310	-2.175	25.260	1.00	11.37	L
ATOM	1641	CB	SER	176	30.048	-1.984	23.946	1.00	14.95	L
ATOM	1642	OG	SER	176	29.532	-0.900	23.225	1.00	14.95	L
ATOM	1643	HG	SER	176	28.578	-0.893	23.351	1.00	0.00	L
ATOM	1644	C	SER	176	28.591	-3.514	25.176	1.00	11.37	L
ATOM	1645	O	SER	176	29.231	-4.575	25.269	1.00	14.95	L
ATOM	1646	N	SER	177	27.274	-3.504	25.017	1.00	10.84	L
ATOM	1647	H	SER	177	26.777	-2.667	25.002	1.00	0.00	L
ATOM	1648	CA	SER	177	26.573	-4.764	24.849	1.00	10.84	L
ATOM	1649	CB	SER	177	25.825	-5.154	26.100	1.00	3.51	L
ATOM	1650	OG	SER	177	25.484	-6.527	26.035	1.00	3.51	L
ATOM	1651	HG	SER	177	24.808	-6.736	26.674	1.00	0.00	L
ATOM	1652	C	SER	177	25.636	-4.645	23.666	1.00	10.84	L
ATOM	1653	O	SER	177	24.780	-3.791	23.645	1.00	3.51	L
ATOM	1654	N	THR	178	25.829	-5.503	22.664	1.00	9.41	L
ATOM	1655	H	THR	178	26.537	-6.172	22.747	1.00	0.00	L
ATOM	1656	CA	THR	178	25.009	-5.466	21.466	1.00	9.41	L
ATOM	1657	CB	THR	178	25.859	-5.393	20.197	1.00	10.37	L
ATOM	1658	OG1	THR	178	26.752	-4.286	20.288	1.00	10.37	L
ATOM	1659	HG1	THR	178	26.255	-3.497	20.538	1.00	0.00	L
ATOM	1660	CG2	THR	178	24.972	-5.243	18.974	1.00	10.37	L
ATOM	1661	C	THR	178	24.122	-6.639	21.295	1.00	9.41	L
ATOM	1662	O	THR	178	24.589	-7.747	21.231	1.00	10.37	L
ATOM	1663	N	LEU	179	22.845	-6.377	21.169	1.00	2.00	L
ATOM	1664	H	LEU	179	22.563	-5.444	21.220	1.00	0.00	L
ATOM	1665	CA	LEU	179	21.849	-7.405	20.971	1.00	2.00	L
ATOM	1666	CB	LEU	179	20.618	-7.113	21.848	1.00	12.38	L
ATOM	1667	CG	LEU	179	19.394	-8.001	21.611	1.00	12.38	L
ATOM	1668	CD1	LEU	179	19.575	-9.274	22.392	1.00	12.38	L
ATOM	1669	CD2	LEU	179	18.111	-7.299	22.040	1.00	12.38	L
ATOM	1670	C	LEU	179	21.474	-7.352	19.493	1.00	2.00	L
ATOM	1671	O	LEU	179	20.786	-6.469	19.069	1.00	12.38	L
ATOM	1672	N	THR	180	21.952	-8.307	18.712	1.00	13.40	L
ATOM	1673	H	THR	180	22.505	-9.010	19.111	1.00	0.00	L
ATOM	1674	CA	THR	180	21.695	-8.368	17.273	1.00	13.40	L
ATOM	1675	CB	THR	180	22.892	-8.937	16.550	1.00	13.48	L
ATOM	1676	OG1	THR	180	24.074	-8.255	16.977	1.00	13.48	L
ATOM	1677	HG1	THR	180	24.702	-8.873	17.353	1.00	0.00	L

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ATOM	1678	CG2 THR	180	22.735	-8.770	15.073	1.00	13.48	L
ATOM	1679	C THR	180	20.499	-9.223	16.920	1.00	13.40	L
ATOM	1680	O THR	180	20.474	-10.407	17.184	1.00	13.48	L
ATOM	1681	N LEU	181	19.507	-8.618	16.309	1.00	22.07	L
ATOM	1682	H LEU	181	19.566	-7.686	16.091	1.00	0.00	L
ATOM	1683	CA LEU	181	18.320	-9.351	15.969	1.00	22.07	L
ATOM	1684	CB LEU	181	17.129	-8.767	16.724	1.00	16.56	L
ATOM	1685	CG LEU	181	17.085	-9.016	18.208	1.00	16.56	L
ATOM	1686	CD1 LEU	181	16.410	-7.899	18.921	1.00	16.56	L
ATOM	1687	CD2 LEU	181	16.316	-10.226	18.418	1.00	16.56	L
ATOM	1688	C LEU	181	18.030	-9.264	14.479	1.00	22.07	L
ATOM	1689	O LEU	181	18.559	-8.369	13.787	1.00	16.56	L
ATOM	1690	N SER	182	17.208	-10.196	13.985	1.00	18.81	L
ATOM	1691	H SER	182	16.890	-10.920	14.565	1.00	0.00	L
ATOM	1692	CA SER	182	16.774	-10.149	12.595	1.00	18.81	L
ATOM	1693	CB SER	182	15.989	-11.400	12.238	1.00	10.52	L
ATOM	1694	OG SER	182	14.619	-11.288	12.612	1.00	10.52	L
ATOM	1695	HG SER	182	14.066	-11.220	11.823	1.00	0.00	L
ATOM	1696	C SER	182	15.813	-8.938	12.558	1.00	18.81	L
ATOM	1697	O SER	182	15.189	-8.588	13.572	1.00	10.52	L
ATOM	1698	N LYS	183	15.709	-8.300	11.404	1.00	13.50	L
ATOM	1699	H LYS	183	16.233	-8.611	10.630	1.00	0.00	L
ATOM	1700	CA LYS	183	14.842	-7.148	11.251	1.00	13.50	L
ATOM	1701	CB LYS	183	14.982	-6.583	9.823	1.00	32.48	L
ATOM	1702	CG LYS	183	14.491	-5.153	9.629	1.00	32.48	L
ATOM	1703	CD LYS	183	14.042	-4.911	8.200	1.00	32.48	L
ATOM	1704	CE LYS	183	13.053	-3.752	8.101	1.00	32.48	L
ATOM	1705	NZ LYS	183	13.653	-2.472	7.570	1.00	32.48	L
ATOM	1706	HZ1 LYS	183	12.999	-2.050	6.883	1.00	0.00	L
ATOM	1707	HZ2 LYS	183	14.554	-2.699	7.100	1.00	0.00	L
ATOM	1708	HZ3 LYS	183	13.825	-1.813	8.353	1.00	0.00	L
ATOM	1709	C LYS	183	13.388	-7.533	11.519	1.00	13.50	L
ATOM	1710	O LYS	183	12.514	-6.687	11.707	1.00	32.48	L
ATOM	1711	N ALA	184	13.134	-8.822	11.573	1.00	13.68	L
ATOM	1712	H ALA	184	13.855	-9.481	11.494	1.00	0.00	L
ATOM	1713	CA ALA	184	11.777	-9.276	11.753	1.00	13.68	L
ATOM	1714	CB ALA	184	11.490	-10.404	10.794	1.00	28.11	L
ATOM	1715	C ALA	184	11.438	-9.684	13.142	1.00	13.68	L
ATOM	1716	O ALA	184	10.262	-9.850	13.445	1.00	28.11	L
ATOM	1717	N ASP	185	12.438	-9.887	13.984	1.00	21.27	L
ATOM	1718	H ASP	185	13.360	-9.834	13.679	1.00	0.00	L
ATOM	1719	CA ASP	185	12.131	-10.195	15.385	1.00	21.27	L
ATOM	1720	CB ASP	185	13.305	-10.858	16.112	1.00	37.40	L
ATOM	1721	CG ASP	185	13.366	-12.362	15.929	1.00	37.40	L
ATOM	1722	OD1 ASP	185	12.383	-13.007	15.473	1.00	37.40	L
ATOM	1723	OD2 ASP	185	14.438	-12.909	16.250	1.00	37.40	L
ATOM	1724	C ASP	185	11.918	-8.808	16.018	1.00	21.27	L
ATOM	1725	O ASP	185	11.051	-8.605	16.885	1.00	37.40	L
ATOM	1726	N TYR	186	12.730	-7.866	15.544	1.00	31.20	L
ATOM	1727	H TYR	186	13.375	-8.105	14.848	1.00	0.00	L
ATOM	1728	CA TYR	186	12.687	-6.499	16.027	1.00	31.20	L
ATOM	1729	CB TYR	186	13.848	-5.668	15.447	1.00	22.82	L
ATOM	1730	CG TYR	186	13.985	-4.367	16.158	1.00	22.82	L
ATOM	1731	CD1 TYR	186	14.202	-4.334	17.524	1.00	22.82	L
ATOM	1732	CE1 TYR	186	14.183	-3.161	18.217	1.00	22.82	L
ATOM	1733	CD2 TYR	186	13.766	-3.175	15.501	1.00	22.82	L

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ATOM	1734	CE2 TYR	186	13.748	-1.976	16.196	1.00	22.82	L
ATOM	1735	CZ TYR	186	13.950	-1.989	17.553	1.00	22.82	L
ATOM	1736	OH TYR	186	13.854	-0.818	18.246	1.00	22.82	L
ATOM	1737	HH TYR	186	14.631	-0.275	18.070	1.00	0.00	L
ATOM	1738	C TYR	186	11.349	-5.877	15.663	1.00	31.20	L
ATOM	1739	O TYR	186	10.802	-5.035	16.403	1.00	22.82	L
ATOM	1740	N GLU	187	10.832	-6.312	14.514	1.00	26.76	L
ATOM	1741	H GLU	187	11.336	-6.961	13.990	1.00	0.00	L
ATOM	1742	CA GLU	187	9.538	-5.873	14.021	1.00	26.76	L
ATOM	1743	CB GLU	187	9.386	-6.376	12.590	1.00	41.55	L
ATOM	1744	CG GLU	187	8.013	-6.157	11.975	1.00	41.55	L
ATOM	1745	CD GLU	187	7.299	-7.466	11.509	1.00	41.55	L
ATOM	1746	OE1 GLU	187	6.035	-7.412	11.359	1.00	41.55	L
ATOM	1747	OE2 GLU	187	7.990	-8.517	11.296	1.00	41.55	L
ATOM	1748	C GLU	187	8.492	-6.526	14.966	1.00	26.76	L
ATOM	1749	O GLU	187	7.434	-5.962	15.227	1.00	41.55	L
ATOM	1750	N LYS	188	8.872	-7.687	15.506	1.00	22.56	L
ATOM	1751	H LYS	188	9.770	-8.008	15.277	1.00	0.00	L
ATOM	1752	CA LYS	188	8.089	-8.561	16.415	1.00	22.56	L
ATOM	1753	CB LYS	188	8.666	-9.985	16.385	1.00	29.39	L
ATOM	1754	CG LYS	188	7.692	-11.076	15.945	1.00	29.39	L
ATOM	1755	CD LYS	188	8.191	-11.802	14.703	1.00	29.39	L
ATOM	1756	CE LYS	188	8.991	-13.090	15.059	1.00	29.39	L
ATOM	1757	NZ LYS	188	9.549	-13.145	16.460	1.00	29.39	L
ATOM	1758	HZ1 LYS	188	10.123	-12.288	16.598	1.00	0.00	L
ATOM	1759	HZ2 LYS	188	10.169	-13.976	16.534	1.00	0.00	L
ATOM	1760	HZ3 LYS	188	8.797	-13.206	17.177	1.00	0.00	L
ATOM	1761	C LYS	188	7.938	-8.187	17.889	1.00	22.56	L
ATOM	1762	O LYS	188	7.299	-8.905	18.657	1.00	29.39	L
ATOM	1763	N HIS	189	8.510	-7.080	18.299	1.00	10.26	L
ATOM	1764	H HIS	189	9.006	-6.512	17.670	1.00	0.00	L
ATOM	1765	CA HIS	189	8.391	-6.723	19.684	1.00	10.26	L
ATOM	1766	CB HIS	189	9.493	-7.402	20.455	1.00	32.11	L
ATOM	1767	CG HIS	189	9.510	-8.880	20.269	1.00	32.11	L
ATOM	1768	CD2 HIS	189	10.371	-9.689	19.617	1.00	32.11	L
ATOM	1769	ND1 HIS	189	8.548	-9.699	20.808	1.00	32.11	L
ATOM	1770	HD1 HIS	189	7.779	-9.395	21.323	1.00	0.00	L
ATOM	1771	CE1 HIS	189	8.822	-10.953	20.502	1.00	32.11	L
ATOM	1772	NE2 HIS	189	9.921	-10.977	19.778	1.00	32.11	L
ATOM	1773	HE2 HIS	189	10.332	-11.788	19.408	1.00	0.00	L
ATOM	1774	C HIS	189	8.391	-5.257	20.002	1.00	10.26	L
ATOM	1775	O HIS	189	8.978	-4.429	19.280	1.00	32.11	L
ATOM	1776	N LYS	190	7.740	-4.955	21.124	1.00	21.55	L
ATOM	1777	H LYS	190	7.376	-5.694	21.642	1.00	0.00	L
ATOM	1778	CA LYS	190	7.538	-3.593	21.624	1.00	21.55	L
ATOM	1779	CB LYS	190	6.254	-3.549	22.447	0.00	20.00	L
ATOM	1780	CG LYS	190	6.060	-2.279	23.229	0.00	20.00	L
ATOM	1781	CD LYS	190	5.318	-1.254	22.396	0.00	20.00	L
ATOM	1782	CE LYS	190	6.270	-0.251	21.747	0.00	20.00	L
ATOM	1783	NZ LYS	190	5.551	0.699	20.841	0.00	20.00	L
ATOM	1784	HZ1 LYS	190	4.548	0.426	20.784	1.00	0.00	L
ATOM	1785	HZ2 LYS	190	5.970	0.658	19.888	1.00	0.00	L
ATOM	1786	HZ3 LYS	190	5.629	1.668	21.212	1.00	0.00	L
ATOM	1787	C LYS	190	8.683	-3.054	22.449	1.00	21.55	L
ATOM	1788	O LYS	190	9.372	-2.134	22.018	1.00	20.00	L
ATOM	1789	N VAL	191	8.901	-3.642	23.621	1.00	2.00	L

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ATOM	1790	H	VAL	191	8.358	-4.419	23.881	1.00	0.00	L
ATOM	1791	CA	VAL	191	9.934	-3.144	24.502	1.00	2.00	L
ATOM	1792	CB	VAL	191	9.311	-2.820	25.898	1.00	13.72	L
ATOM	1793	CG1	VAL	191	7.834	-3.149	25.889	1.00	13.72	L
ATOM	1794	CG2	VAL	191	10.058	-3.517	27.012	1.00	13.72	L
ATOM	1795	C	VAL	191	11.245	-3.911	24.652	1.00	2.00	L
ATOM	1796	O	VAL	191	11.276	-5.110	24.970	1.00	13.72	L
ATOM	1797	N	TYR	192	12.317	-3.154	24.421	1.00	29.02	L
ATOM	1798	H	TYR	192	12.148	-2.222	24.188	1.00	0.00	L
ATOM	1799	CA	TYR	192	13.702	-3.595	24.482	1.00	29.02	L
ATOM	1800	CB	TYR	192	14.422	-3.150	23.216	1.00	23.95	L
ATOM	1801	CG	TYR	192	13.973	-3.986	22.065	1.00	23.95	L
ATOM	1802	CD1	TYR	192	14.499	-5.280	21.868	1.00	23.95	L
ATOM	1803	CE1	TYR	192	13.975	-6.113	20.902	1.00	23.95	L
ATOM	1804	CD2	TYR	192	12.915	-3.559	21.250	1.00	23.95	L
ATOM	1805	CE2	TYR	192	12.384	-4.389	20.280	1.00	23.95	L
ATOM	1806	CZ	TYR	192	12.910	-5.661	20.108	1.00	23.95	L
ATOM	1807	OH	TYR	192	12.347	-6.471	19.138	1.00	23.95	L
ATOM	1808	HH	TYR	192	11.854	-5.923	18.520	1.00	0.00	L
ATOM	1809	C	TYR	192	14.368	-2.987	25.708	1.00	29.02	L
ATOM	1810	O	TYR	192	14.411	-1.758	25.828	1.00	23.95	L
ATOM	1811	N	ALA	193	14.900	-3.844	26.599	1.00	6.43	L
ATOM	1812	H	ALA	193	14.876	-4.810	26.413	1.00	0.00	L
ATOM	1813	CA	ALA	193	15.500	-3.360	27.811	1.00	6.43	L
ATOM	1814	CB	ALA	193	14.624	-3.674	28.975	1.00	3.76	L
ATOM	1815	C	ALA	193	16.869	-3.853	28.113	1.00	6.43	L
ATOM	1816	O	ALA	193	17.225	-4.965	27.780	1.00	3.76	L
ATOM	1817	N	CYS	194	17.602	-3.004	28.820	1.00	8.18	L
ATOM	1818	H	CYS	194	17.207	-2.153	29.055	1.00	0.00	L
ATOM	1819	CA	CYS	194	18.957	-3.276	29.254	1.00	8.18	L
ATOM	1820	C	CYS	194	19.026	-3.294	30.817	1.00	8.18	L
ATOM	1821	O	CYS	194	19.005	-2.273	31.468	1.00	8.73	L
ATOM	1822	CB	CYS	194	19.892	-2.191	28.667	1.00	8.73	L
ATOM	1823	SG	CYS	194	21.560	-2.720	28.915	1.00	8.73	L
ATOM	1824	N	GLU	195	19.102	-4.470	31.421	1.00	12.11	L
ATOM	1825	H	GLU	195	19.104	-5.299	30.891	1.00	0.00	L
ATOM	1826	CA	GLU	195	19.175	-4.535	32.868	1.00	12.11	L
ATOM	1827	CB	GLU	195	18.395	-5.690	33.407	1.00	18.12	L
ATOM	1828	CG	GLU	195	18.236	-5.549	34.864	1.00	18.12	L
ATOM	1829	CD	GLU	195	17.445	-6.665	35.485	1.00	18.12	L
ATOM	1830	OE1	GLU	195	17.949	-7.808	35.461	1.00	18.12	L
ATOM	1831	OE2	GLU	195	16.332	-6.390	35.999	1.00	18.12	L
ATOM	1832	C	GLU	195	20.597	-4.710	33.281	1.00	12.11	L
ATOM	1833	O	GLU	195	21.307	-5.569	32.729	1.00	18.12	L
ATOM	1834	N	VAL	196	21.044	-3.892	34.244	1.00	2.97	L
ATOM	1835	H	VAL	196	20.447	-3.229	34.646	1.00	0.00	L
ATOM	1836	CA	VAL	196	22.420	-4.001	34.696	1.00	2.97	L
ATOM	1837	CB	VAL	196	23.329	-2.968	34.046	1.00	8.95	L
ATOM	1838	CG1	VAL	196	22.519	-1.985	33.261	1.00	8.95	L
ATOM	1839	CG2	VAL	196	24.218	-2.332	35.126	1.00	8.95	L
ATOM	1840	C	VAL	196	22.697	-4.030	36.173	1.00	2.97	L
ATOM	1841	O	VAL	196	22.112	-3.313	36.931	1.00	8.95	L
ATOM	1842	N	THR	197	23.622	-4.909	36.536	1.00	4.04	L
ATOM	1843	H	THR	197	24.057	-5.433	35.826	1.00	0.00	L
ATOM	1844	CA	THR	197	24.036	-5.144	37.899	1.00	4.04	L
ATOM	1845	CB	THR	197	23.914	-6.662	38.304	1.00	7.18	L

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ATOM	1846	OG1 THR	197	22.551	-7.040	38.382	1.00	7.18	L
ATOM	1847	HG1 THR	197	22.309	-7.517	37.576	1.00	0.00	L
ATOM	1848	CG2 THR	197	24.525	-6.908	39.672	1.00	7.18	L
ATOM	1849	C THR	197	25.497	-4.753	38.013	1.00	4.04	L
ATOM	1850	O THR	197	26.292	-5.040	37.114	1.00	7.18	L
ATOM	1851	N HIS	198	25.824	-4.104	39.127	1.00	2.00	L
ATOM	1852	H HIS	198	25.100	-3.923	39.770	1.00	0.00	L
ATOM	1853	CA HIS	198	27.154	-3.616	39.475	1.00	2.00	L
ATOM	1854	CB HIS	198	27.567	-2.437	38.598	1.00	2.00	L
ATOM	1855	CG HIS	198	28.962	-1.974	38.829	1.00	2.00	L
ATOM	1856	CD2 HIS	198	30.102	-2.196	38.138	1.00	2.00	L
ATOM	1857	ND1 HIS	198	29.299	-1.114	39.845	1.00	2.00	L
ATOM	1858	HD1 HIS	198	28.705	-0.753	40.530	1.00	0.00	L
ATOM	1859	CE1 HIS	198	30.584	-0.817	39.772	1.00	2.00	L
ATOM	1860	NE2 HIS	198	31.097	-1.460	38.742	1.00	2.00	L
ATOM	1861	HE2 HIS	198	32.030	-1.438	38.460	1.00	0.00	L
ATOM	1862	C HIS	198	27.027	-3.163	40.916	1.00	2.00	L
ATOM	1863	O HIS	198	25.985	-2.649	41.318	1.00	2.00	L
ATOM	1864	N GLN	199	28.101	-3.347	41.680	1.00	27.54	L
ATOM	1865	H GLN	199	28.925	-3.717	41.295	1.00	0.00	L
ATOM	1866	CA GLN	199	28.089	-3.012	43.107	1.00	27.54	L
ATOM	1867	CB GLN	199	29.330	-3.507	43.840	1.00	15.80	L
ATOM	1868	CG GLN	199	30.606	-2.814	43.553	1.00	15.80	L
ATOM	1869	CD GLN	199	31.793	-3.689	43.976	1.00	15.80	L
ATOM	1870	OE1 GLN	199	32.334	-3.513	45.065	1.00	15.80	L
ATOM	1871	NE2 GLN	199	32.189	-4.641	43.117	1.00	15.80	L
ATOM	1872	HE21 GLN	199	32.959	-5.199	43.358	1.00	0.00	L
ATOM	1873	HE22 GLN	199	31.695	-4.740	42.274	1.00	0.00	L
ATOM	1874	C GLN	199	27.908	-1.615	43.482	1.00	27.54	L
ATOM	1875	O GLN	199	27.773	-1.324	44.639	1.00	15.80	L
ATOM	1876	N GLY	200	27.912	-0.754	42.498	1.00	6.15	L
ATOM	1877	H GLY	200	28.046	-1.064	41.576	1.00	0.00	L
ATOM	1878	CA GLY	200	27.721	0.643	42.790	1.00	6.15	L
ATOM	1879	C GLY	200	26.237	0.933	42.827	1.00	6.15	L
ATOM	1880	O GLY	200	25.790	2.045	43.163	1.00	16.30	L
ATOM	1881	N LEU	201	25.503	-0.097	42.444	1.00	14.37	L
ATOM	1882	H LEU	201	25.970	-0.913	42.181	1.00	0.00	L
ATOM	1883	CA LEU	201	24.058	-0.081	42.412	1.00	14.37	L
ATOM	1884	CB LEU	201	23.608	-0.662	41.067	1.00	7.23	L
ATOM	1885	CG LEU	201	23.380	0.262	39.845	1.00	7.23	L
ATOM	1886	CD1 LEU	201	24.068	1.628	39.972	1.00	7.23	L
ATOM	1887	CD2 LEU	201	23.875	-0.545	38.651	1.00	7.23	L
ATOM	1888	C LEU	201	23.438	-0.875	43.610	1.00	14.37	L
ATOM	1889	O LEU	201	24.000	-1.847	44.071	1.00	7.23	L
ATOM	1890	N SER	202	22.291	-0.441	44.115	1.00	2.00	L
ATOM	1891	H SER	202	21.859	0.343	43.717	1.00	0.00	L
ATOM	1892	CA SER	202	21.659	-1.096	45.253	1.00	2.00	L
ATOM	1893	CB SER	202	20.581	-0.236	45.862	1.00	5.65	L
ATOM	1894	OG SER	202	21.100	0.572	46.849	1.00	5.65	L
ATOM	1895	HG SER	202	21.630	0.017	47.436	1.00	0.00	L
ATOM	1896	C SER	202	20.982	-2.240	44.622	1.00	2.00	L
ATOM	1897	O SER	202	20.996	-3.384	45.104	1.00	5.65	L
ATOM	1898	N SER	203	20.346	-1.923	43.523	1.00	24.17	L
ATOM	1899	H SER	203	20.355	-1.004	43.189	1.00	0.00	L
ATOM	1900	CA SER	203	19.655	-2.944	42.820	1.00	24.17	L
ATOM	1901	CB SER	203	18.206	-2.994	43.302	1.00	14.26	L

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ATOM	1902	OG	SER	203	17.385	-2.084	42.586	1.00	14.26	L
ATOM	1903	HG	SER	203	17.915	-1.369	42.239	1.00	0.00	L
ATOM	1904	C	SER	203	19.758	-2.544	41.366	1.00	24.17	L
ATOM	1905	O	SER	203	20.018	-1.385	41.077	1.00	14.26	L
ATOM	1906	N	PRO	204	19.588	-3.517	40.462	1.00	12.26	L
ATOM	1907	CD	PRO	204	19.378	-4.906	40.907	1.00	16.08	L
ATOM	1908	CA	PRO	204	19.614	-3.459	39.013	1.00	12.26	L
ATOM	1909	CB	PRO	204	18.825	-4.695	38.618	1.00	16.08	L
ATOM	1910	CG	PRO	204	19.213	-5.659	39.604	1.00	16.08	L
ATOM	1911	C	PRO	204	19.025	-2.212	38.403	1.00	12.26	L
ATOM	1912	O	PRO	204	17.979	-1.712	38.819	1.00	16.08	L
ATOM	1913	N	VAL	205	19.699	-1.702	37.401	1.00	13.44	L
ATOM	1914	H	VAL	205	20.541	-2.098	37.112	1.00	0.00	L
ATOM	1915	CA	VAL	205	19.191	-0.535	36.715	1.00	13.44	L
ATOM	1916	CB	VAL	205	20.243	0.558	36.718	1.00	14.22	L
ATOM	1917	CG1	VAL	205	19.752	1.803	36.040	1.00	14.22	L
ATOM	1918	CG2	VAL	205	20.615	0.807	38.122	1.00	14.22	L
ATOM	1919	C	VAL	205	18.862	-0.916	35.289	1.00	13.44	L
ATOM	1920	O	VAL	205	19.738	-1.397	34.573	1.00	14.22	L
ATOM	1921	N	THR	206	17.624	-0.726	34.863	1.00	8.60	L
ATOM	1922	H	THR	206	16.936	-0.361	35.454	1.00	0.00	L
ATOM	1923	CA	THR	206	17.313	-1.068	33.479	1.00	8.60	L
ATOM	1924	CB	THR	206	16.050	-2.003	33.337	1.00	13.98	L
ATOM	1925	OG1	THR	206	14.892	-1.330	33.797	1.00	13.98	L
ATOM	1926	HG1	THR	206	14.615	-1.696	34.639	1.00	0.00	L
ATOM	1927	CG2	THR	206	16.180	-3.215	34.137	1.00	13.98	L
ATOM	1928	C	THR	206	17.083	0.167	32.595	1.00	8.60	L
ATOM	1929	O	THR	206	16.550	1.162	33.052	1.00	13.98	L
ATOM	1930	N	LYS	207	17.540	0.149	31.355	1.00	25.20	L
ATOM	1931	H	LYS	207	18.103	-0.581	31.022	1.00	0.00	L
ATOM	1932	CA	LYS	207	17.202	1.261	30.485	1.00	25.20	L
ATOM	1933	CB	LYS	207	18.436	1.972	29.946	1.00	22.73	L
ATOM	1934	CG	LYS	207	18.343	3.471	30.038	1.00	22.73	L
ATOM	1935	CD	LYS	207	18.934	3.998	31.325	1.00	22.73	L
ATOM	1936	CE	LYS	207	18.546	5.447	31.499	1.00	22.73	L
ATOM	1937	NZ	LYS	207	18.239	6.139	30.203	1.00	22.73	L
ATOM	1938	HZ1	LYS	207	17.367	5.750	29.775	1.00	0.00	L
ATOM	1939	HZ2	LYS	207	19.021	5.982	29.533	1.00	0.00	L
ATOM	1940	HZ3	LYS	207	18.115	7.153	30.355	1.00	0.00	L
ATOM	1941	C	LYS	207	16.454	0.569	29.349	1.00	25.20	L
ATOM	1942	O	LYS	207	16.823	-0.558	28.955	1.00	22.73	L
ATOM	1943	N	SER	208	15.391	1.210	28.851	1.00	2.00	L
ATOM	1944	H	SER	208	15.137	2.085	29.220	1.00	0.00	L
ATOM	1945	CA	SER	208	14.618	0.632	27.767	1.00	2.00	L
ATOM	1946	CB	SER	208	13.541	-0.274	28.325	1.00	32.66	L
ATOM	1947	OG	SER	208	13.110	0.186	29.579	1.00	32.66	L
ATOM	1948	HG	SER	208	12.202	-0.088	29.713	1.00	0.00	L
ATOM	1949	C	SER	208	13.986	1.632	26.813	1.00	2.00	L
ATOM	1950	O	SER	208	13.906	2.837	27.083	1.00	32.66	L
ATOM	1951	N	PHE	209	13.560	1.109	25.664	1.00	24.62	L
ATOM	1952	H	PHE	209	13.667	0.144	25.517	1.00	0.00	L
ATOM	1953	CA	PHE	209	12.932	1.901	24.619	1.00	24.62	L
ATOM	1954	CB	PHE	209	13.932	2.322	23.569	1.00	26.21	L
ATOM	1955	CG	PHE	209	14.355	1.225	22.650	1.00	26.21	L
ATOM	1956	CD1	PHE	209	15.669	0.784	22.642	1.00	26.21	L
ATOM	1957	CD2	PHE	209	13.461	0.644	21.778	1.00	26.21	L



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ATOM	1958	CE1 PHE	209	16.077	-0.201	21.800	1.00	26.21	L
ATOM	1959	CE2 PHE	209	13.865	-0.357	20.921	1.00	26.21	L
ATOM	1960	CZ PHE	209	15.172	-0.778	20.935	1.00	26.21	L
ATOM	1961	C PHE	209	11.811	1.137	23.967	1.00	24.62	L
ATOM	1962	O PHE	209	11.921	-0.050	23.730	1.00	26.21	L
ATOM	1963	N ASN	210	10.719	1.830	23.685	1.00	14.43	L
ATOM	1964	H ASN	210	10.678	2.791	23.883	1.00	0.00	L
ATOM	1965	CA ASN	210	9.586	1.209	23.083	1.00	14.43	L
ATOM	1966	CB ASN	210	8.316	1.905	23.516	1.00	10.63	L
ATOM	1967	CG ASN	210	7.945	1.594	24.966	1.00	10.63	L
ATOM	1968	OD1 ASN	210	7.386	2.449	25.699	1.00	10.63	L
ATOM	1969	ND2 ASN	210	8.248	0.385	25.392	1.00	10.63	L
ATOM	1970	HD21 ASN	210	8.277	-0.347	24.741	1.00	0.00	L
ATOM	1971	HD22 ASN	210	8.438	0.273	26.350	1.00	0.00	L
ATOM	1972	C ASN	210	9.781	1.345	21.610	1.00	14.43	L
ATOM	1973	O ASN	210	9.812	2.434	21.099	1.00	10.63	L
ATOM	1974	N ARG	211	9.946	0.198	20.958	1.00	15.32	L
ATOM	1975	H ARG	211	9.937	-0.623	21.478	1.00	0.00	L
ATOM	1976	CA ARG	211	10.135	0.130	19.532	1.00	15.32	L
ATOM	1977	CB ARG	211	10.027	-1.309	19.052	1.00	21.88	L
ATOM	1978	CG ARG	211	10.948	-1.586	17.881	1.00	21.88	L
ATOM	1979	CD ARG	211	10.212	-1.989	16.627	1.00	21.88	L
ATOM	1980	NE ARG	211	9.139	-2.914	16.954	1.00	21.88	L
ATOM	1981	HE ARG	211	9.316	-3.613	17.613	1.00	0.00	L
ATOM	1982	CZ ARG	211	7.938	-2.858	16.408	1.00	21.88	L
ATOM	1983	NH1 ARG	211	7.667	-1.926	15.516	1.00	21.88	L
ATOM	1984	HH11 ARG	211	6.729	-1.834	15.181	1.00	0.00	L
ATOM	1985	HH12 ARG	211	8.329	-1.191	15.344	1.00	0.00	L
ATOM	1986	NH2 ARG	211	7.013	-3.719	16.775	1.00	21.88	L
ATOM	1987	HH21 ARG	211	7.030	-4.087	17.707	1.00	0.00	L
ATOM	1988	HH22 ARG	211	6.459	-4.177	16.081	1.00	0.00	L
ATOM	1989	C ARG	211	9.107	0.973	18.803	1.00	15.32	L
ATOM	1990	O ARG	211	8.027	1.246	19.383	1.00	21.88	L
ATOM	1991	OT ARG	211	9.399	1.357	17.659	1.00	21.88	L
ATOM	1992	CB GLN	1	59.288	15.533	17.845	1.00	51.82	H
ATOM	1993	CG GLN	1	58.518	14.222	17.516	1.00	51.82	H
ATOM	1994	CD GLN	1	57.180	14.059	18.266	1.00	51.82	H
ATOM	1995	OE1 GLN	1	57.157	13.730	19.465	1.00	51.82	H
ATOM	1996	NE2 GLN	1	56.062	14.283	17.558	1.00	51.82	H
ATOM	1997	HE21 GLN	1	55.428	13.548	17.466	1.00	0.00	H
ATOM	1998	HE22 GLN	1	55.930	15.176	17.163	1.00	0.00	H
ATOM	1999	C GLN	1	61.243	14.232	16.916	1.00	43.11	H
ATOM	2000	O GLN	1	61.150	14.290	15.679	1.00	51.82	H
ATOM	2001	HT1 GLN	1	62.437	16.635	17.185	1.00	0.00	H
ATOM	2002	HT2 GLN	1	61.255	17.470	18.074	1.00	0.00	H
ATOM	2003	N GLN	1	61.421	16.732	17.355	1.00	43.11	H
ATOM	2004	HT3 GLN	1	60.954	17.029	16.468	1.00	0.00	H
ATOM	2005	CA GLN	1	60.835	15.426	17.800	1.00	43.11	H
ATOM	2006	N VAL	2	61.688	13.149	17.550	1.00	25.49	H
ATOM	2007	H VAL	2	61.774	13.163	18.523	1.00	0.00	H
ATOM	2008	CA VAL	2	62.047	11.957	16.794	1.00	25.49	H
ATOM	2009	CB VAL	2	63.034	11.057	17.589	1.00	31.23	H
ATOM	2010	CG1 VAL	2	62.962	9.589	17.043	1.00	31.23	H
ATOM	2011	CG2 VAL	2	64.485	11.633	17.490	1.00	31.23	H
ATOM	2012	C VAL	2	60.772	11.136	16.458	1.00	25.49	H
ATOM	2013	O VAL	2	60.004	10.733	17.345	1.00	31.23	H

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ATOM	2014	N	GLN	3	60.556	10.887	15.171	1.00	34.39	H
ATOM	2015	H	GLN	3	61.192	11.188	14.489	1.00	0.00	H
ATOM	2016	CA	GLN	3	59.375	10.151	14.799	1.00	34.39	H
ATOM	2017	CB	GLN	3	58.383	11.060	14.122	1.00	23.21	H
ATOM	2018	CG	GLN	3	56.995	10.569	14.248	1.00	23.21	H
ATOM	2019	CD	GLN	3	56.047	11.694	14.558	1.00	23.21	H
ATOM	2020	OE1	GLN	3	55.865	12.062	15.722	1.00	23.21	H
ATOM	2021	NE2	GLN	3	55.438	12.270	13.518	1.00	23.21	H
ATOM	2022	HE21	GLN	3	55.634	13.211	13.330	1.00	0.00	H
ATOM	2023	HE22	GLN	3	54.818	11.732	12.985	1.00	0.00	H
ATOM	2024	C	GLN	3	59.616	8.949	13.919	1.00	34.39	H
ATOM	2025	O	GLN	3	60.394	9.005	12.964	1.00	23.21	H
ATOM	2026	N	LEU	4	58.939	7.858	14.259	1.00	26.14	H
ATOM	2027	H	LEU	4	58.365	7.865	15.055	1.00	0.00	H
ATOM	2028	CA	LEU	4	59.023	6.639	13.483	1.00	26.14	H
ATOM	2029	CB	LEU	4	59.625	5.512	14.324	1.00	24.39	H
ATOM	2030	CG	LEU	4	61.145	5.569	14.521	1.00	24.39	H
ATOM	2031	CD1	LEU	4	61.591	4.266	15.113	1.00	24.39	H
ATOM	2032	CD2	LEU	4	61.844	5.835	13.204	1.00	24.39	H
ATOM	2033	C	LEU	4	57.610	6.299	13.058	1.00	26.14	H
ATOM	2034	O	LEU	4	56.768	5.992	13.893	1.00	24.39	H
ATOM	2035	N	VAL	5	57.359	6.345	11.757	1.00	6.54	H
ATOM	2036	H	VAL	5	58.065	6.549	11.123	1.00	0.00	H
ATOM	2037	CA	VAL	5	56.020	6.071	11.258	1.00	6.54	H
ATOM	2038	CB	VAL	5	55.414	7.344	10.647	1.00	25.47	H
ATOM	2039	CG1	VAL	5	54.246	7.016	9.704	1.00	25.47	H
ATOM	2040	CG2	VAL	5	54.967	8.246	11.772	1.00	25.47	H
ATOM	2041	C	VAL	5	55.852	4.930	10.258	1.00	6.54	H
ATOM	2042	O	VAL	5	56.075	5.112	9.078	1.00	25.47	H
ATOM	2043	N	GLN	6	55.379	3.781	10.733	1.00	21.58	H
ATOM	2044	H	GLN	6	55.166	3.731	11.697	1.00	0.00	H
ATOM	2045	CA	GLN	6	55.175	2.610	9.890	1.00	21.58	H
ATOM	2046	CB	GLN	6	55.221	1.333	10.725	1.00	12.62	H
ATOM	2047	CG	GLN	6	56.339	1.273	11.689	1.00	12.62	H
ATOM	2048	CD	GLN	6	56.174	0.103	12.564	1.00	12.62	H
ATOM	2049	OE1	GLN	6	56.318	0.187	13.807	1.00	12.62	H
ATOM	2050	NE2	GLN	6	55.858	-1.022	11.946	1.00	12.62	H
ATOM	2051	HE21	GLN	6	56.566	-1.513	11.473	1.00	0.00	H
ATOM	2052	HE22	GLN	6	54.924	-1.317	11.984	1.00	0.00	H
ATOM	2053	C	GLN	6	53.917	2.523	9.026	1.00	21.58	H
ATOM	2054	O	GLN	6	52.878	3.172	9.253	1.00	12.62	H
ATOM	2055	N	SER	7	54.051	1.665	8.020	1.00	15.58	H
ATOM	2056	H	SER	7	54.920	1.206	7.926	1.00	0.00	H
ATOM	2057	CA	SER	7	53.010	1.379	7.068	1.00	15.58	H
ATOM	2058	CB	SER	7	53.569	0.423	6.025	1.00	28.33	H
ATOM	2059	OG	SER	7	54.156	-0.722	6.628	1.00	28.33	H
ATOM	2060	HG	SER	7	54.210	-0.605	7.576	1.00	0.00	H
ATOM	2061	C	SER	7	51.757	0.771	7.716	1.00	15.58	H
ATOM	2062	O	SER	7	51.803	0.269	8.847	1.00	28.33	H
ATOM	2063	N	GLY	8	50.658	0.800	6.965	1.00	16.97	H
ATOM	2064	H	GLY	8	50.705	1.215	6.078	1.00	0.00	H
ATOM	2065	CA	GLY	8	49.386	0.262	7.409	1.00	16.97	H
ATOM	2066	C	GLY	8	49.289	-1.255	7.464	1.00	16.97	H
ATOM	2067	O	GLY	8	50.032	-1.958	6.779	1.00	28.86	H
ATOM	2068	N	ALA	9	48.341	-1.736	8.277	1.00	14.69	H
ATOM	2069	H	ALA	9	47.784	-1.085	8.754	1.00	0.00	H

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ATOM	2070	CA	ALA	9	48.077	-3.154	8.513	1.00	14.69	H
ATOM	2071	CB	ALA	9	47.088	-3.308	9.651	1.00	32.05	H
ATOM	2072	C	ALA	9	47.553	-3.828	7.277	1.00	14.69	H
ATOM	2073	O	ALA	9	46.576	-3.367	6.693	1.00	32.05	H
ATOM	2074	N	GLU	10	48.181	-4.944	6.904	1.00	24.24	H
ATOM	2075	H	GLU	10	48.920	-5.271	7.458	1.00	0.00	H
ATOM	2076	CA	GLU	10	47.818	-5.696	5.698	1.00	24.24	H
ATOM	2077	CB	GLU	10	49.049	-5.754	4.765	1.00	45.24	H
ATOM	2078	CG	GLU	10	49.108	-4.706	3.659	1.00	45.24	H
ATOM	2079	CD	GLU	10	50.362	-3.800	3.714	1.00	45.24	H
ATOM	2080	OE1	GLU	10	51.501	-4.248	3.376	1.00	45.24	H
ATOM	2081	OE2	GLU	10	50.198	-2.615	4.092	1.00	45.24	H
ATOM	2082	C	GLU	10	47.377	-7.122	6.004	1.00	24.24	H
ATOM	2083	O	GLU	10	47.823	-7.706	6.983	1.00	45.24	H
ATOM	2084	N	VAL	11	46.491	-7.674	5.179	1.00	15.05	H
ATOM	2085	H	VAL	11	46.114	-7.116	4.461	1.00	0.00	H
ATOM	2086	CA	VAL	11	46.067	-9.069	5.330	1.00	15.05	H
ATOM	2087	CB	VAL	11	44.675	-9.341	4.858	1.00	28.33	H
ATOM	2088	CG1	VAL	11	43.987	-10.170	5.840	1.00	28.33	H
ATOM	2089	CG2	VAL	11	43.969	-8.074	4.586	1.00	28.33	H
ATOM	2090	C	VAL	11	46.917	-9.796	4.319	1.00	15.05	H
ATOM	2091	O	VAL	11	47.079	-9.294	3.206	1.00	28.33	H
ATOM	2092	N	VAL	12	47.433	-10.975	4.658	1.00	7.83	H
ATOM	2093	H	VAL	12	47.252	-11.339	5.540	1.00	0.00	H
ATOM	2094	CA	VAL	12	48.274	-11.723	3.734	1.00	7.83	H
ATOM	2095	CB	VAL	12	49.769	-11.694	4.115	1.00	12.98	H
ATOM	2096	CG1	VAL	12	50.616	-12.136	2.901	1.00	12.98	H
ATOM	2097	CG2	VAL	12	50.168	-10.317	4.560	1.00	12.98	H
ATOM	2098	C	VAL	12	47.855	-13.134	3.779	1.00	7.83	H
ATOM	2099	O	VAL	12	47.546	-13.621	4.848	1.00	12.98	H
ATOM	2100	N	LYS	13	47.878	-13.799	2.626	1.00	12.90	H
ATOM	2101	H	LYS	13	48.181	-13.347	1.812	1.00	0.00	H
ATOM	2102	CA	LYS	13	47.474	-15.204	2.568	1.00	12.90	H
ATOM	2103	CB	LYS	13	47.066	-15.632	1.152	1.00	26.04	H
ATOM	2104	CG	LYS	13	46.950	-14.519	0.151	1.00	26.04	H
ATOM	2105	CD	LYS	13	45.577	-14.459	-0.533	1.00	26.04	H
ATOM	2106	CE	LYS	13	45.352	-13.068	-1.257	1.00	26.04	H
ATOM	2107	NZ	LYS	13	45.878	-12.999	-2.691	1.00	26.04	H
ATOM	2108	HZ1	LYS	13	46.530	-13.783	-2.863	1.00	0.00	H
ATOM	2109	HZ2	LYS	13	46.375	-12.094	-2.860	1.00	0.00	H
ATOM	2110	HZ3	LYS	13	45.078	-13.072	-3.355	1.00	0.00	H
ATOM	2111	C	LYS	13	48.576	-16.111	3.052	1.00	12.90	H
ATOM	2112	O	LYS	13	49.764	-15.851	2.876	1.00	26.04	H
ATOM	2113	N	PRO	14	48.186	-17.204	3.690	1.00	19.03	H
ATOM	2114	CD	PRO	14	46.812	-17.633	3.953	1.00	8.63	H
ATOM	2115	CA	PRO	14	49.191	-18.137	4.186	1.00	19.03	H
ATOM	2116	CB	PRO	14	48.389	-19.311	4.696	1.00	8.63	H
ATOM	2117	CG	PRO	14	47.021	-18.888	4.744	1.00	8.63	H
ATOM	2118	C	PRO	14	49.961	-18.500	2.946	1.00	19.03	H
ATOM	2119	O	PRO	14	49.372	-18.940	1.949	1.00	8.63	H
ATOM	2120	N	GLY	15	51.263	-18.291	2.993	1.00	15.60	H
ATOM	2121	H	GLY	15	51.679	-17.935	3.814	1.00	0.00	H
ATOM	2122	CA	GLY	15	52.100	-18.583	1.852	1.00	15.60	H
ATOM	2123	C	GLY	15	52.634	-17.282	1.294	1.00	15.60	H
ATOM	2124	O	GLY	15	53.831	-17.114	1.120	1.00	24.24	H
ATOM	2125	N	ALA	16	51.735	-16.346	1.025	1.00	31.60	H

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ATOM	2126	H	ALA	16	50.790	-16.526	1.196	1.00	0.00	H
ATOM	2127	CA	ALA	16	52.110	-15.057	0.466	1.00	31.60	H
ATOM	2128	CB	ALA	16	50.875	-14.151	0.382	1.00	33.02	H
ATOM	2129	C	ALA	16	53.193	-14.382	1.274	1.00	31.60	H
ATOM	2130	O	ALA	16	53.571	-14.858	2.361	1.00	33.02	H
ATOM	2131	N	SER	17	53.663	-13.253	0.743	1.00	33.71	H
ATOM	2132	H	SER	17	53.292	-12.939	-0.106	1.00	0.00	H
ATOM	2133	CA	SER	17	54.701	-12.462	1.382	1.00	33.71	H
ATOM	2134	CB	SER	17	55.913	-12.436	0.463	1.00	38.75	H
ATOM	2135	OG	SER	17	56.882	-13.345	0.927	1.00	38.75	H
ATOM	2136	HG	SER	17	57.719	-13.213	0.483	1.00	0.00	H
ATOM	2137	C	SER	17	54.250	-11.017	1.705	1.00	33.71	H
ATOM	2138	O	SER	17	53.120	-10.614	1.388	1.00	38.75	H
ATOM	2139	N	VAL	18	55.124	-10.252	2.356	1.00	19.66	H
ATOM	2140	H	VAL	18	55.994	-10.623	2.632	1.00	0.00	H
ATOM	2141	CA	VAL	18	54.807	-8.877	2.660	1.00	19.66	H
ATOM	2142	CB	VAL	18	53.644	-8.747	3.683	1.00	30.84	H
ATOM	2143	CG1	VAL	18	54.079	-9.067	5.095	1.00	30.84	H
ATOM	2144	CG2	VAL	18	53.124	-7.359	3.622	1.00	30.84	H
ATOM	2145	C	VAL	18	56.003	-8.042	3.110	1.00	19.66	H
ATOM	2146	O	VAL	18	56.947	-8.569	3.698	1.00	30.84	H
ATOM	2147	N	LYS	19	55.945	-6.731	2.813	1.00	20.82	H
ATOM	2148	H	LYS	19	55.137	-6.392	2.365	1.00	0.00	H
ATOM	2149	CA	LYS	19	57.017	-5.776	3.098	1.00	20.82	H
ATOM	2150	CB	LYS	19	57.694	-5.352	1.771	1.00	30.41	H
ATOM	2151	CG	LYS	19	58.780	-4.280	1.884	1.00	30.41	H
ATOM	2152	CD	LYS	19	60.133	-4.799	1.458	1.00	30.41	H
ATOM	2153	CE	LYS	19	60.506	-4.433	0.011	1.00	30.41	H
ATOM	2154	NZ	LYS	19	60.055	-3.062	-0.389	1.00	30.41	H
ATOM	2155	HZ1	LYS	19	59.076	-3.190	-0.731	1.00	0.00	H
ATOM	2156	HZ2	LYS	19	60.634	-2.706	-1.178	1.00	0.00	H
ATOM	2157	HZ3	LYS	19	60.065	-2.406	0.410	1.00	0.00	H
ATOM	2158	C	LYS	19	56.427	-4.577	3.799	1.00	20.82	H
ATOM	2159	O	LYS	19	55.621	-3.860	3.264	1.00	30.41	H
ATOM	2160	N	LEU	20	56.859	-4.368	5.023	1.00	22.99	H
ATOM	2161	H	LEU	20	57.546	-4.960	5.400	1.00	0.00	H
ATOM	2162	CA	LEU	20	56.362	-3.288	5.820	1.00	22.99	H
ATOM	2163	CB	LEU	20	56.213	-3.733	7.260	1.00	14.78	H
ATOM	2164	CG	LEU	20	55.268	-4.781	7.733	1.00	14.78	H
ATOM	2165	CD1	LEU	20	54.509	-5.404	6.602	1.00	14.78	H
ATOM	2166	CD2	LEU	20	56.127	-5.774	8.439	1.00	14.78	H
ATOM	2167	C	LEU	20	57.358	-2.174	5.830	1.00	22.99	H
ATOM	2168	O	LEU	20	58.541	-2.421	5.964	1.00	14.78	H
ATOM	2169	N	SER	21	56.884	-0.939	5.774	1.00	8.24	H
ATOM	2170	H	SER	21	55.925	-0.763	5.703	1.00	0.00	H
ATOM	2171	CA	SER	21	57.803	0.176	5.827	1.00	8.24	H
ATOM	2172	CB	SER	21	57.481	1.130	4.698	1.00	36.84	H
ATOM	2173	OG	SER	21	56.510	2.075	5.088	1.00	36.84	H
ATOM	2174	HG	SER	21	56.572	2.861	4.527	1.00	0.00	H
ATOM	2175	C	SER	21	57.764	0.885	7.176	1.00	8.24	H
ATOM	2176	O	SER	21	56.778	0.799	7.919	1.00	36.84	H
ATOM	2177	N	CYS	22	58.861	1.578	7.482	1.00	22.74	H
ATOM	2178	H	CYS	22	59.592	1.575	6.844	1.00	0.00	H
ATOM	2179	CA	CYS	22	59.046	2.339	8.712	1.00	22.74	H
ATOM	2180	C	CYS	22	59.832	3.599	8.350	1.00	22.74	H
ATOM	2181	O	CYS	22	61.052	3.564	8.189	1.00	28.76	H

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ATOM	2182	CB	CYS	22	59.841	1.528	9.725	1.00	28.76	H
ATOM	2183	SG	CYS	22	60.408	2.495	11.159	1.00	28.76	H
ATOM	2184	N	LYS	23	59.110	4.715	8.237	1.00	17.44	H
ATOM	2185	H	LYS	23	58.146	4.656	8.403	1.00	0.00	H
ATOM	2186	CA	LYS	23	59.667	6.019	7.880	1.00	17.44	H
ATOM	2187	CB	LYS	23	58.608	6.841	7.161	1.00	39.76	H
ATOM	2188	CG	LYS	23	59.189	7.928	6.334	1.00	39.76	H
ATOM	2189	CD	LYS	23	58.533	9.297	6.600	1.00	39.76	H
ATOM	2190	CE	LYS	23	59.370	10.420	5.963	1.00	39.76	H
ATOM	2191	NZ	LYS	23	60.710	9.937	5.452	1.00	39.76	H
ATOM	2192	HZ1	LYS	23	60.580	9.181	4.745	1.00	0.00	H
ATOM	2193	HZ2	LYS	23	61.272	9.549	6.241	1.00	0.00	H
ATOM	2194	HZ3	LYS	23	61.242	10.712	5.013	1.00	0.00	H
ATOM	2195	C	LYS	23	60.208	6.793	9.065	1.00	17.44	H
ATOM	2196	O	LYS	23	59.502	7.058	10.041	1.00	39.76	H
ATOM	2197	N	ALA	24	61.467	7.181	8.945	1.00	10.56	H
ATOM	2198	H	ALA	24	61.914	6.970	8.106	1.00	0.00	H
ATOM	2199	CA	ALA	24	62.186	7.887	9.980	1.00	10.56	H
ATOM	2200	CB	ALA	24	63.607	7.308	10.100	1.00	32.14	H
ATOM	2201	C	ALA	24	62.269	9.401	9.796	1.00	10.56	H
ATOM	2202	O	ALA	24	62.185	9.908	8.660	1.00	32.14	H
ATOM	2203	N	SER	25	62.441	10.114	10.921	1.00	12.88	H
ATOM	2204	H	SER	25	62.453	9.648	11.771	1.00	0.00	H
ATOM	2205	CA	SER	25	62.575	11.571	10.892	1.00	12.88	H
ATOM	2206	CB	SER	25	61.272	12.218	10.371	1.00	32.82	H
ATOM	2207	OG	SER	25	60.122	11.609	10.932	1.00	32.82	H
ATOM	2208	HG	SER	25	59.540	12.301	11.242	1.00	0.00	H
ATOM	2209	C	SER	25	62.991	12.258	12.216	1.00	12.88	H
ATOM	2210	O	SER	25	62.701	11.777	13.337	1.00	32.82	H
ATOM	2211	N	GLY	26	63.660	13.404	12.078	1.00	46.62	H
ATOM	2212	H	GLY	26	63.881	13.742	11.193	1.00	0.00	H
ATOM	2213	CA	GLY	26	64.070	14.159	13.251	1.00	46.62	H
ATOM	2214	C	GLY	26	65.429	13.808	13.823	1.00	46.62	H
ATOM	2215	O	GLY	26	65.846	14.325	14.864	1.00	31.98	H
ATOM	2216	N	TYR	27	66.118	12.894	13.161	1.00	44.12	H
ATOM	2217	H	TYR	27	65.731	12.447	12.374	1.00	0.00	H
ATOM	2218	CA	TYR	27	67.440	12.525	13.603	1.00	44.12	H
ATOM	2219	CB	TYR	27	67.329	11.423	14.662	1.00	20.20	H
ATOM	2220	CG	TYR	27	67.007	10.061	14.159	1.00	20.20	H
ATOM	2221	CD1	TYR	27	65.706	9.602	14.115	1.00	20.20	H
ATOM	2222	CE1	TYR	27	65.420	8.275	13.711	1.00	20.20	H
ATOM	2223	CD2	TYR	27	68.028	9.194	13.791	1.00	20.20	H
ATOM	2224	CE2	TYR	27	67.764	7.878	13.389	1.00	20.20	H
ATOM	2225	CZ	TYR	27	66.462	7.423	13.350	1.00	20.20	H
ATOM	2226	OH	TYR	27	66.239	6.139	12.915	1.00	20.20	H
ATOM	2227	HH	TYR	27	66.587	5.505	13.539	1.00	0.00	H
ATOM	2228	C	TYR	27	68.191	12.104	12.332	1.00	44.12	H
ATOM	2229	O	TYR	27	67.593	12.129	11.253	1.00	20.20	H
ATOM	2230	N	ILE	28	69.480	11.772	12.435	1.00	10.47	H
ATOM	2231	H	ILE	28	69.917	11.790	13.298	1.00	0.00	H
ATOM	2232	CA	ILE	28	70.243	11.378	11.276	1.00	10.47	H
ATOM	2233	CB	ILE	28	71.794	11.413	11.504	1.00	12.16	H
ATOM	2234	CG2	ILE	28	72.464	10.786	10.288	1.00	12.16	H
ATOM	2235	CG1	ILE	28	72.325	12.826	11.837	1.00	12.16	H
ATOM	2236	CD1	ILE	28	71.558	13.991	11.269	1.00	12.16	H
ATOM	2237	C	ILE	28	69.891	9.926	11.109	1.00	10.47	H

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ATOM	2238	O	ILE	28	70.309	9.067	11.914	1.00	12.16	H
ATOM	2239	N	PHE	29	69.120	9.640	10.076	1.00	42.35	H
ATOM	2240	H	PHE	29	68.788	10.349	9.491	1.00	0.00	H
ATOM	2241	CA	PHE	29	68.751	8.268	9.831	1.00	42.35	H
ATOM	2242	CB	PHE	29	68.190	8.120	8.421	1.00	34.12	H
ATOM	2243	CG	PHE	29	67.458	6.849	8.219	1.00	34.12	H
ATOM	2244	CD1	PHE	29	66.643	6.353	9.217	1.00	34.12	H
ATOM	2245	CD2	PHE	29	67.587	6.132	7.045	1.00	34.12	H
ATOM	2246	CE1	PHE	29	65.963	5.164	9.060	1.00	34.12	H
ATOM	2247	CE2	PHE	29	66.894	4.918	6.873	1.00	34.12	H
ATOM	2248	CZ	PHE	29	66.082	4.441	7.889	1.00	34.12	H
ATOM	2249	C	PHE	29	69.944	7.300	10.024	1.00	42.35	H
ATOM	2250	O	PHE	29	69.863	6.318	10.787	1.00	34.12	H
ATOM	2251	N	THR	30	71.053	7.588	9.349	1.00	33.79	H
ATOM	2252	H	THR	30	71.081	8.392	8.788	1.00	0.00	H
ATOM	2253	CA	THR	30	72.200	6.707	9.437	1.00	33.79	H
ATOM	2254	CB	THR	30	73.218	6.945	8.283	1.00	24.98	H
ATOM	2255	OG1	THR	30	73.874	8.212	8.446	1.00	24.98	H
ATOM	2256	HG1	THR	30	73.882	8.445	9.368	1.00	0.00	H
ATOM	2257	CG2	THR	30	72.528	6.895	6.970	1.00	24.98	H
ATOM	2258	C	THR	30	72.935	6.773	10.753	1.00	33.79	H
ATOM	2259	O	THR	30	73.900	6.016	10.975	1.00	24.98	H
ATOM	2260	N	SER	31	72.494	7.640	11.654	1.00	14.45	H
ATOM	2261	H	SER	31	71.741	8.209	11.466	1.00	0.00	H
ATOM	2262	CA	SER	31	73.215	7.697	12.932	1.00	14.45	H
ATOM	2263	CB	SER	31	73.156	9.068	13.532	1.00	33.90	H
ATOM	2264	OG	SER	31	73.874	9.952	12.709	1.00	33.90	H
ATOM	2265	HG	SER	31	74.540	9.473	12.206	1.00	0.00	H
ATOM	2266	C	SER	31	72.757	6.698	13.972	1.00	14.45	H
ATOM	2267	O	SER	31	73.336	6.670	15.046	1.00	33.90	H
ATOM	2268	N	TYR	32	71.738	5.880	13.649	1.00	30.58	H
ATOM	2269	H	TYR	32	71.343	5.970	12.762	1.00	0.00	H
ATOM	2270	CA	TYR	32	71.183	4.859	14.565	1.00	30.58	H
ATOM	2271	CB	TYR	32	69.888	5.364	15.223	1.00	28.19	H
ATOM	2272	CG	TYR	32	70.100	6.552	16.110	1.00	28.19	H
ATOM	2273	CD1	TYR	32	70.137	6.414	17.507	1.00	28.19	H
ATOM	2274	CE1	TYR	32	70.417	7.502	18.318	1.00	28.19	H
ATOM	2275	CD2	TYR	32	70.337	7.805	15.564	1.00	28.19	H
ATOM	2276	CE2	TYR	32	70.616	8.883	16.355	1.00	28.19	H
ATOM	2277	CZ	TYR	32	70.664	8.739	17.725	1.00	28.19	H
ATOM	2278	OH	TYR	32	71.011	9.840	18.493	1.00	28.19	H
ATOM	2279	HH	TYR	32	70.257	10.121	19.007	1.00	0.00	H
ATOM	2280	C	TYR	32	70.839	3.553	13.864	1.00	30.58	H
ATOM	2281	O	TYR	32	70.580	3.544	12.675	1.00	28.19	H
ATOM	2282	N	TYR	33	70.819	2.450	14.603	1.00	37.56	H
ATOM	2283	H	TYR	33	71.059	2.496	15.551	1.00	0.00	H
ATOM	2284	CA	TYR	33	70.421	1.187	13.985	1.00	37.56	H
ATOM	2285	CB	TYR	33	71.029	-0.025	14.711	1.00	61.84	H
ATOM	2286	CG	TYR	33	72.439	-0.351	14.312	1.00	61.84	H
ATOM	2287	CD1	TYR	33	73.427	0.638	14.351	1.00	61.84	H
ATOM	2288	CE1	TYR	33	74.743	0.365	14.011	1.00	61.84	H
ATOM	2289	CD2	TYR	33	72.801	-1.635	13.915	1.00	61.84	H
ATOM	2290	CE2	TYR	33	74.120	-1.928	13.568	1.00	61.84	H
ATOM	2291	CZ	TYR	33	75.090	-0.915	13.620	1.00	61.84	H
ATOM	2292	OH	TYR	33	76.407	-1.150	13.279	1.00	61.84	H
ATOM	2293	HH	TYR	33	76.952	-0.425	13.591	1.00	0.00	H

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ATOM	2294	C	TYR	33	68.897	1.077	14.106	1.00	37.56	H
ATOM	2295	O	TYR	33	68.316	1.473	15.124	1.00	61.84	H
ATOM	2296	N	MET	34	68.248	0.548	13.076	1.00	36.91	H
ATOM	2297	H	MET	34	68.744	0.286	12.269	1.00	0.00	H
ATOM	2298	CA	MET	34	66.813	0.340	13.169	1.00	36.91	H
ATOM	2299	CB	MET	34	66.155	0.427	11.810	1.00	19.77	H
ATOM	2300	CG	MET	34	64.700	0.635	11.927	1.00	19.77	H
ATOM	2301	SD	MET	34	64.398	1.929	13.180	1.00	19.77	H
ATOM	2302	CE	MET	34	64.346	3.399	12.044	1.00	19.77	H
ATOM	2303	C	MET	34	66.591	-1.077	13.724	1.00	36.91	H
ATOM	2304	O	MET	34	67.130	-2.051	13.209	1.00	19.77	H
ATOM	2305	N	TYR	35	65.824	-1.176	14.798	1.00	21.06	H
ATOM	2306	H	TYR	35	65.467	-0.355	15.180	1.00	0.00	H
ATOM	2307	CA	TYR	35	65.516	-2.455	15.408	1.00	21.06	H
ATOM	2308	CB	TYR	35	65.419	-2.307	16.917	1.00	29.33	H
ATOM	2309	CG	TYR	35	66.694	-2.540	17.654	1.00	29.33	H
ATOM	2310	CD1	TYR	35	67.674	-3.344	17.134	1.00	29.33	H
ATOM	2311	CE1	TYR	35	68.813	-3.607	17.832	1.00	29.33	H
ATOM	2312	CD2	TYR	35	66.890	-1.996	18.891	1.00	29.33	H
ATOM	2313	CE2	TYR	35	68.029	-2.256	19.600	1.00	29.33	H
ATOM	2314	CZ	TYR	35	68.990	-3.066	19.069	1.00	29.33	H
ATOM	2315	OH	TYR	35	70.123	-3.355	19.785	1.00	29.33	H
ATOM	2316	HH	TYR	35	69.906	-3.934	20.517	1.00	0.00	H
ATOM	2317	C	TYR	35	64.150	-2.853	14.922	1.00	21.06	H
ATOM	2318	O	TYR	35	63.326	-1.975	14.647	1.00	29.33	H
ATOM	2319	N	TRP	36	63.900	-4.157	14.812	1.00	18.09	H
ATOM	2320	H	TRP	36	64.603	-4.804	15.009	1.00	0.00	H
ATOM	2321	CA	TRP	36	62.568	-4.630	14.412	1.00	18.09	H
ATOM	2322	CB	TRP	36	62.617	-5.346	13.089	1.00	27.88	H
ATOM	2323	CG	TRP	36	62.570	-4.415	11.943	1.00	27.88	H
ATOM	2324	CD2	TRP	36	61.405	-3.823	11.333	1.00	27.88	H
ATOM	2325	CE2	TRP	36	61.851	-3.078	10.232	1.00	27.88	H
ATOM	2326	CE3	TRP	36	60.044	-3.853	11.609	1.00	27.88	H
ATOM	2327	CD1	TRP	36	63.620	-4.011	11.219	1.00	27.88	H
ATOM	2328	NE1	TRP	36	63.207	-3.209	10.188	1.00	27.88	H
ATOM	2329	HE1	TRP	36	63.804	-2.806	9.519	1.00	0.00	H
ATOM	2330	CZ2	TRP	36	60.992	-2.369	9.404	1.00	27.88	H
ATOM	2331	CZ3	TRP	36	59.191	-3.148	10.791	1.00	27.88	H
ATOM	2332	CH2	TRP	36	59.668	-2.414	9.699	1.00	27.88	H
ATOM	2333	C	TRP	36	61.977	-5.542	15.487	1.00	18.09	H
ATOM	2334	O	TRP	36	62.628	-6.482	15.960	1.00	27.88	H
ATOM	2335	N	VAL	37	60.746	-5.257	15.896	1.00	34.15	H
ATOM	2336	H	VAL	37	60.286	-4.532	15.497	1.00	0.00	H
ATOM	2337	CA	VAL	37	60.138	-6.059	16.944	1.00	34.15	H
ATOM	2338	CB	VAL	37	60.069	-5.267	18.250	1.00	13.93	H
ATOM	2339	CG1	VAL	37	59.221	-6.000	19.230	1.00	13.93	H
ATOM	2340	CG2	VAL	37	61.454	-5.036	18.803	1.00	13.93	H
ATOM	2341	C	VAL	37	58.753	-6.589	16.642	1.00	34.15	H
ATOM	2342	O	VAL	37	57.922	-5.875	16.098	1.00	13.93	H
ATOM	2343	N	LYS	38	58.531	-7.849	17.027	1.00	24.97	H
ATOM	2344	H	LYS	38	59.266	-8.335	17.439	1.00	0.00	H
ATOM	2345	CA	LYS	38	57.243	-8.555	16.855	1.00	24.97	H
ATOM	2346	CB	LYS	38	57.522	-9.984	16.354	1.00	5.77	H
ATOM	2347	CG	LYS	38	56.546	-11.053	16.729	1.00	5.77	H
ATOM	2348	CD	LYS	38	56.393	-12.023	15.586	1.00	5.77	H
ATOM	2349	CE	LYS	38	55.655	-13.289	15.976	1.00	5.77	H

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ATOM	2350	NZ	LYS	38	55.317	-14.026	14.762	1.00	5.77	H
ATOM	2351	HZ1	LYS	38	54.470	-13.619	14.310	1.00	0.00	H
ATOM	2352	HZ2	LYS	38	55.186	-15.043	14.923	1.00	0.00	H
ATOM	2353	HZ3	LYS	38	56.113	-13.870	14.106	1.00	0.00	H
ATOM	2354	C	LYS	38	56.464	-8.605	18.168	1.00	24.97	H
ATOM	2355	O	LYS	38	57.067	-8.768	19.224	1.00	5.77	H
ATOM	2356	N	GLN	39	55.143	-8.439	18.107	1.00	33.27	H
ATOM	2357	H	GLN	39	54.730	-8.262	17.248	1.00	0.00	H
ATOM	2358	CA	GLN	39	54.291	-8.546	19.306	1.00	33.27	H
ATOM	2359	CB	GLN	39	53.985	-7.190	19.917	1.00	14.44	H
ATOM	2360	CG	GLN	39	53.420	-7.288	21.356	1.00	14.44	H
ATOM	2361	CD	GLN	39	53.179	-5.885	22.022	1.00	14.44	H
ATOM	2362	OE1	GLN	39	52.783	-4.891	21.361	1.00	14.44	H
ATOM	2363	NE2	GLN	39	53.418	-5.823	23.338	1.00	14.44	H
ATOM	2364	HE21	GLN	39	53.619	-4.942	23.713	1.00	0.00	H
ATOM	2365	HE22	GLN	39	53.379	-6.651	23.854	1.00	0.00	H
ATOM	2366	C	GLN	39	52.973	-9.258	18.970	1.00	33.27	H
ATOM	2367	O	GLN	39	52.030	-8.661	18.428	1.00	14.44	H
ATOM	2368	N	ALA	40	52.935	-10.552	19.272	1.00	26.24	H
ATOM	2369	H	ALA	40	53.732	-10.985	19.662	1.00	0.00	H
ATOM	2370	CA	ALA	40	51.751	-11.355	19.009	1.00	26.24	H
ATOM	2371	CB	ALA	40	52.125	-12.793	18.480	1.00	14.64	H
ATOM	2372	C	ALA	40	50.987	-11.468	20.284	1.00	26.24	H
ATOM	2373	O	ALA	40	51.592	-11.460	21.370	1.00	14.64	H
ATOM	2374	N	PRO	41	49.645	-11.637	20.157	1.00	29.21	H
ATOM	2375	CD	PRO	41	49.047	-11.871	18.829	1.00	43.07	H
ATOM	2376	CA	PRO	41	48.618	-11.771	21.199	1.00	29.21	H
ATOM	2377	CB	PRO	41	47.708	-12.888	20.655	1.00	43.07	H
ATOM	2378	CG	PRO	41	48.045	-12.972	19.129	1.00	43.07	H
ATOM	2379	C	PRO	41	49.239	-12.170	22.511	1.00	29.21	H
ATOM	2380	O	PRO	41	50.060	-13.097	22.540	1.00	43.07	H
ATOM	2381	N	GLY	42	48.862	-11.493	23.585	1.00	19.68	H
ATOM	2382	H	GLY	42	48.207	-10.765	23.535	1.00	0.00	H
ATOM	2383	CA	GLY	42	49.414	-11.844	24.881	1.00	19.68	H
ATOM	2384	C	GLY	42	50.770	-12.553	24.808	1.00	19.68	H
ATOM	2385	O	GLY	42	50.990	-13.679	25.351	1.00	22.09	H
ATOM	2386	N	GLN	43	51.691	-11.932	24.066	1.00	34.93	H
ATOM	2387	H	GLN	43	51.458	-11.121	23.574	1.00	0.00	H
ATOM	2388	CA	GLN	43	53.039	-12.465	23.984	1.00	34.93	H
ATOM	2389	CB	GLN	43	53.365	-12.965	22.575	1.00	49.66	H
ATOM	2390	CG	GLN	43	54.851	-12.833	22.161	1.00	49.66	H
ATOM	2391	CD	GLN	43	55.753	-13.915	22.754	1.00	49.66	H
ATOM	2392	OE1	GLN	43	55.820	-15.058	22.255	1.00	49.66	H
ATOM	2393	NE2	GLN	43	56.466	-13.558	23.815	1.00	49.66	H
ATOM	2394	HE21	GLN	43	56.583	-14.216	24.540	1.00	0.00	H
ATOM	2395	HE22	GLN	43	56.848	-12.662	23.840	1.00	0.00	H
ATOM	2396	C	GLN	43	53.910	-11.285	24.350	1.00	34.93	H
ATOM	2397	O	GLN	43	53.450	-10.127	24.380	1.00	49.66	H
ATOM	2398	N	GLY	44	55.160	-11.576	24.677	1.00	45.30	H
ATOM	2399	H	GLY	44	55.456	-12.498	24.727	1.00	0.00	H
ATOM	2400	CA	GLY	44	56.085	-10.512	25.004	1.00	45.30	H
ATOM	2401	C	GLY	44	56.449	-9.774	23.735	1.00	45.30	H
ATOM	2402	O	GLY	44	55.608	-9.493	22.873	1.00	14.53	H
ATOM	2403	N	LEU	45	57.727	-9.456	23.622	1.00	21.29	H
ATOM	2404	H	LEU	45	58.346	-9.720	24.342	1.00	0.00	H
ATOM	2405	CA	LEU	45	58.218	-8.745	22.461	1.00	21.29	H



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ATOM	2406	CB	LEU	45	58.612	-7.335	22.865	1.00	43.56	H
ATOM	2407	CG	LEU	45	57.549	-6.242	22.978	1.00	43.56	H
ATOM	2408	CD1	LEU	45	56.294	-6.670	22.310	1.00	43.56	H
ATOM	2409	CD2	LEU	45	57.325	-5.920	24.430	1.00	43.56	H
ATOM	2410	C	LEU	45	59.435	-9.492	21.926	1.00	21.29	H
ATOM	2411	O	LEU	45	60.534	-9.375	22.475	1.00	43.56	H
ATOM	2412	N	GLU	46	59.272	-10.305	20.897	1.00	14.08	H
ATOM	2413	H	GLU	46	58.383	-10.449	20.510	1.00	0.00	H
ATOM	2414	CA	GLU	46	60.449	-10.980	20.364	1.00	14.08	H
ATOM	2415	CB	GLU	46	60.059	-12.144	19.442	1.00	26.79	H
ATOM	2416	CG	GLU	46	60.049	-13.517	20.063	1.00	26.79	H
ATOM	2417	CD	GLU	46	60.066	-14.611	18.999	1.00	26.79	H
ATOM	2418	OE1	GLU	46	59.067	-14.713	18.237	1.00	26.79	H
ATOM	2419	OE2	GLU	46	61.087	-15.352	18.937	1.00	26.79	H
ATOM	2420	C	GLU	46	61.186	-9.920	19.525	1.00	14.08	H
ATOM	2421	O	GLU	46	60.576	-9.200	18.722	1.00	26.79	H
ATOM	2422	N	TRP	47	62.494	-9.815	19.737	1.00	22.21	H
ATOM	2423	H	TRP	47	62.917	-10.370	20.437	1.00	0.00	H
ATOM	2424	CA	TRP	47	63.310	-8.907	18.949	1.00	22.21	H
ATOM	2425	CB	TRP	47	64.594	-8.542	19.682	1.00	29.90	H
ATOM	2426	CG	TRP	47	65.571	-7.902	18.805	1.00	29.90	H
ATOM	2427	CD2	TRP	47	66.657	-8.542	18.106	1.00	29.90	H
ATOM	2428	CE2	TRP	47	67.369	-7.530	17.431	1.00	29.90	H
ATOM	2429	CE3	TRP	47	67.098	-9.873	17.992	1.00	29.90	H
ATOM	2430	CD1	TRP	47	65.657	-6.591	18.527	1.00	29.90	H
ATOM	2431	NE1	TRP	47	66.736	-6.346	17.701	1.00	29.90	H
ATOM	2432	HE1	TRP	47	67.004	-5.470	17.367	1.00	0.00	H
ATOM	2433	CZ2	TRP	47	68.497	-7.801	16.650	1.00	29.90	H
ATOM	2434	CZ3	TRP	47	68.204	-10.141	17.220	1.00	29.90	H
ATOM	2435	CH2	TRP	47	68.898	-9.106	16.556	1.00	29.90	H
ATOM	2436	C	TRP	47	63.643	-9.693	17.690	1.00	22.21	H
ATOM	2437	O	TRP	47	64.148	-10.807	17.762	1.00	29.90	H
ATOM	2438	N	ILE	48	63.326	-9.115	16.543	1.00	23.00	H
ATOM	2439	H	ILE	48	62.904	-8.239	16.547	1.00	0.00	H
ATOM	2440	CA	ILE	48	63.568	-9.765	15.275	1.00	23.00	H
ATOM	2441	CB	ILE	48	62.694	-9.158	14.184	1.00	20.72	H
ATOM	2442	CG2	ILE	48	63.140	-9.674	12.815	1.00	20.72	H
ATOM	2443	CG1	ILE	48	61.240	-9.496	14.433	1.00	20.72	H
ATOM	2444	CD1	ILE	48	60.340	-8.775	13.502	1.00	20.72	H
ATOM	2445	C	ILE	48	65.020	-9.663	14.790	1.00	23.00	H
ATOM	2446	O	ILE	48	65.760	-10.666	14.666	1.00	20.72	H
ATOM	2447	N	GLY	49	65.403	-8.435	14.484	1.00	27.67	H
ATOM	2448	H	GLY	49	64.784	-7.681	14.596	1.00	0.00	H
ATOM	2449	CA	GLY	49	66.736	-8.190	14.005	1.00	27.67	H
ATOM	2450	C	GLY	49	67.013	-6.703	13.986	1.00	27.67	H
ATOM	2451	O	GLY	49	66.229	-5.883	14.496	1.00	22.93	H
ATOM	2452	N	GLU	50	68.156	-6.379	13.390	1.00	26.92	H
ATOM	2453	H	GLU	50	68.708	-7.104	13.038	1.00	0.00	H
ATOM	2454	CA	GLU	50	68.632	-5.018	13.239	1.00	26.92	H
ATOM	2455	CB	GLU	50	69.680	-4.706	14.293	1.00	26.25	H
ATOM	2456	CG	GLU	50	70.860	-5.630	14.202	1.00	26.25	H
ATOM	2457	CD	GLU	50	71.876	-5.411	15.298	1.00	26.25	H
ATOM	2458	OE1	GLU	50	71.862	-4.347	15.950	1.00	26.25	H
ATOM	2459	OE2	GLU	50	72.707	-6.302	15.516	1.00	26.25	H
ATOM	2460	C	GLU	50	69.278	-4.838	11.880	1.00	26.92	H
ATOM	2461	O	GLU	50	69.686	-5.790	11.219	1.00	26.25	H

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ATOM	2462	N	ILE	51	69.334	-3.587	11.481	1.00	24.38	H
ATOM	2463	H	ILE	51	68.929	-2.899	12.052	1.00	0.00	H
ATOM	2464	CA	ILE	51	69.961	-3.166	10.254	1.00	24.38	H
ATOM	2465	CB	ILE	51	68.970	-2.728	9.151	1.00	23.54	H
ATOM	2466	CG2	ILE	51	68.340	-1.360	9.472	1.00	23.54	H
ATOM	2467	CG1	ILE	51	69.725	-2.625	7.830	1.00	23.54	H
ATOM	2468	CD1	ILE	51	68.889	-2.959	6.630	1.00	23.54	H
ATOM	2469	C	ILE	51	70.688	-1.919	10.698	1.00	24.38	H
ATOM	2470	O	ILE	51	70.202	-1.183	11.599	1.00	23.54	H
ATOM	2471	N	ASN	52	71.859	-1.697	10.101	1.00	26.01	H
ATOM	2472	H	ASN	52	72.188	-2.347	9.445	1.00	0.00	H
ATOM	2473	CA	ASN	52	72.653	-0.522	10.397	1.00	26.01	H
ATOM	2474	CB	ASN	52	74.113	-0.861	10.461	1.00	22.08	H
ATOM	2475	CG	ASN	52	74.937	0.345	10.616	1.00	22.08	H
ATOM	2476	OD1	ASN	52	74.534	1.423	10.195	1.00	22.08	H
ATOM	2477	ND2	ASN	52	76.088	0.203	11.225	1.00	22.08	H
ATOM	2478	HD21	ASN	52	76.337	0.874	11.902	1.00	0.00	H
ATOM	2479	HD22	ASN	52	76.662	-0.554	11.003	1.00	0.00	H
ATOM	2480	C	ASN	52	72.352	0.360	9.201	1.00	26.01	H
ATOM	2481	O	ASN	52	72.916	0.228	8.123	1.00	22.08	H
ATOM	2482	N	PRO	53	71.463	1.305	9.396	1.00	37.04	H
ATOM	2483	CD	PRO	53	70.809	1.629	10.676	1.00	34.04	H
ATOM	2484	CA	PRO	53	71.071	2.194	8.309	1.00	37.04	H
ATOM	2485	CB	PRO	53	70.280	3.267	9.034	1.00	34.04	H
ATOM	2486	CG	PRO	53	69.725	2.525	10.267	1.00	34.04	H
ATOM	2487	C	PRO	53	72.137	2.768	7.356	1.00	37.04	H
ATOM	2488	O	PRO	53	71.840	3.078	6.188	1.00	34.04	H
ATOM	2489	N	SER	54	73.371	2.890	7.808	1.00	33.04	H
ATOM	2490	H	SER	54	73.615	2.584	8.705	1.00	0.00	H
ATOM	2491	CA	SER	54	74.365	3.493	6.932	1.00	33.04	H
ATOM	2492	CB	SER	54	75.338	4.319	7.753	1.00	27.00	H
ATOM	2493	OG	SER	54	76.247	3.433	8.364	1.00	27.00	H
ATOM	2494	HG	SER	54	77.069	3.884	8.593	1.00	0.00	H
ATOM	2495	C	SER	54	75.173	2.455	6.199	1.00	33.04	H
ATOM	2496	O	SER	54	75.876	2.741	5.223	1.00	27.00	H
ATOM	2497	N	ASN	55	75.055	1.253	6.720	1.00	30.31	H
ATOM	2498	H	ASN	55	74.430	1.156	7.453	1.00	0.00	H
ATOM	2499	CA	ASN	55	75.791	0.073	6.303	1.00	30.31	H
ATOM	2500	CB	ASN	55	76.051	-0.674	7.607	1.00	42.33	H
ATOM	2501	CG	ASN	55	77.253	-1.515	7.579	1.00	42.33	H
ATOM	2502	OD1	ASN	55	78.010	-1.557	8.558	1.00	42.33	H
ATOM	2503	ND2	ASN	55	77.446	-2.226	6.488	1.00	42.33	H
ATOM	2504	HD21	ASN	55	77.026	-1.929	5.642	1.00	0.00	H
ATOM	2505	HD22	ASN	55	77.999	-3.026	6.564	1.00	0.00	H
ATOM	2506	C	ASN	55	75.021	-0.832	5.354	1.00	30.31	H
ATOM	2507	O	ASN	55	75.365	-1.012	4.186	1.00	42.33	H
ATOM	2508	N	GLY	56	73.971	-1.412	5.926	1.00	24.50	H
ATOM	2509	H	GLY	56	73.762	-1.183	6.857	1.00	0.00	H
ATOM	2510	CA	GLY	56	73.136	-2.371	5.250	1.00	24.50	H
ATOM	2511	C	GLY	56	73.466	-3.520	6.160	1.00	24.50	H
ATOM	2512	O	GLY	56	72.916	-4.611	6.069	1.00	9.61	H
ATOM	2513	N	ASP	57	74.416	-3.253	7.056	1.00	13.70	H
ATOM	2514	H	ASP	57	74.875	-2.407	7.097	1.00	0.00	H
ATOM	2515	CA	ASP	57	74.804	-4.255	8.027	1.00	13.70	H
ATOM	2516	CB	ASP	57	75.573	-3.623	9.200	1.00	44.91	H
ATOM	2517	CG	ASP	57	77.057	-4.032	9.235	1.00	44.91	H

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ATOM	2518	OD1 ASP	57	77.760	-3.670	10.218	1.00	44.91	H
ATOM	2519	OD2 ASP	57	77.511	-4.701	8.277	1.00	44.91	H
ATOM	2520	C ASP	57	73.493	-4.871	8.515	1.00	13.70	H
ATOM	2521	O ASP	57	72.421	-4.269	8.446	1.00	44.91	H
ATOM	2522	N THR	58	73.585	-6.069	9.030	1.00	9.05	H
ATOM	2523	H THR	58	74.456	-6.501	9.141	1.00	0.00	H
ATOM	2524	CA THR	58	72.393	-6.730	9.441	1.00	9.05	H
ATOM	2525	CB THR	58	71.698	-7.280	8.209	1.00	28.21	H
ATOM	2526	OG1 THR	58	70.487	-6.556	7.991	1.00	28.21	H
ATOM	2527	HG1 THR	58	70.046	-6.935	7.228	1.00	0.00	H
ATOM	2528	CG2 THR	58	71.408	-8.719	8.360	1.00	28.21	H
ATOM	2529	C THR	58	72.606	-7.845	10.400	1.00	9.05	H
ATOM	2530	O THR	58	73.418	-8.747	10.140	1.00	28.21	H
ATOM	2531	N ASN	59	71.886	-7.800	11.513	1.00	9.54	H
ATOM	2532	H ASN	59	71.301	-7.043	11.694	1.00	0.00	H
ATOM	2533	CA ASN	59	71.987	-8.896	12.462	1.00	9.54	H
ATOM	2534	CB ASN	59	72.653	-8.437	13.753	1.00	50.65	H
ATOM	2535	CG ASN	59	74.040	-9.006	13.899	1.00	50.65	H
ATOM	2536	OD1 ASN	59	74.753	-9.177	12.912	1.00	50.65	H
ATOM	2537	ND2 ASN	59	74.432	-9.319	15.122	1.00	50.65	H
ATOM	2538	HD21 ASN	59	74.002	-10.083	15.567	1.00	0.00	H
ATOM	2539	HD22 ASN	59	75.131	-8.773	15.530	1.00	0.00	H
ATOM	2540	C ASN	59	70.586	-9.425	12.675	1.00	9.54	H
ATOM	2541	O ASN	59	69.612	-8.698	12.473	1.00	50.65	H
ATOM	2542	N PHE	60	70.466	-10.686	13.075	1.00	26.36	H
ATOM	2543	H PHE	60	71.279	-11.194	13.268	1.00	0.00	H
ATOM	2544	CA PHE	60	69.157	-11.304	13.235	1.00	26.36	H
ATOM	2545	CB PHE	60	68.823	-12.108	12.027	1.00	34.86	H
ATOM	2546	CG PHE	60	68.224	-11.314	10.956	1.00	34.86	H
ATOM	2547	CD1 PHE	60	68.857	-11.201	9.740	1.00	34.86	H
ATOM	2548	CD2 PHE	60	66.989	-10.706	11.146	1.00	34.86	H
ATOM	2549	CE1 PHE	60	68.264	-10.494	8.718	1.00	34.86	H
ATOM	2550	CE2 PHE	60	66.384	-9.999	10.138	1.00	34.86	H
ATOM	2551	CZ PHE	60	67.013	-9.889	8.920	1.00	34.86	H
ATOM	2552	C PHE	60	68.994	-12.237	14.364	1.00	26.36	H
ATOM	2553	O PHE	60	69.932	-12.913	14.768	1.00	34.86	H
ATOM	2554	N ASN	61	67.779	-12.284	14.886	1.00	23.92	H
ATOM	2555	H ASN	61	67.106	-11.689	14.544	1.00	0.00	H
ATOM	2556	CA ASN	61	67.530	-13.223	15.928	1.00	23.92	H
ATOM	2557	CB ASN	61	66.225	-12.951	16.597	1.00	39.20	H
ATOM	2558	CG ASN	61	65.952	-13.928	17.683	1.00	39.20	H
ATOM	2559	OD1 ASN	61	66.258	-15.105	17.535	1.00	39.20	H
ATOM	2560	ND2 ASN	61	65.376	-13.461	18.795	1.00	39.20	H
ATOM	2561	HD21 ASN	61	64.636	-13.975	19.174	1.00	0.00	H
ATOM	2562	HD22 ASN	61	65.729	-12.627	19.178	1.00	0.00	H
ATOM	2563	C ASN	61	67.416	-14.429	15.026	1.00	23.92	H
ATOM	2564	O ASN	61	66.617	-14.418	14.084	1.00	39.20	H
ATOM	2565	N GLU	62	68.253	-15.437	15.254	1.00	30.71	H
ATOM	2566	H GLU	62	68.904	-15.368	15.988	1.00	0.00	H
ATOM	2567	CA GLU	62	68.208	-16.634	14.434	1.00	30.71	H
ATOM	2568	CB GLU	62	69.144	-17.708	15.019	1.00	48.54	H
ATOM	2569	CG GLU	62	70.646	-17.326	15.057	1.00	48.54	H
ATOM	2570	CD GLU	62	71.257	-17.068	13.663	1.00	48.54	H
ATOM	2571	OE1 GLU	62	71.227	-17.982	12.804	1.00	48.54	H
ATOM	2572	OE2 GLU	62	71.781	-15.950	13.429	1.00	48.54	H
ATOM	2573	C GLU	62	66.756	-17.189	14.265	1.00	30.71	H

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ATOM	2574	O	GLU	62	66.462	-17.872	13.274	1.00	48.54	H
ATOM	2575	N	LYS	63	65.844	-16.893	15.207	1.00	24.99	H
ATOM	2576	H	LYS	63	66.085	-16.361	15.996	1.00	0.00	H
ATOM	2577	CA	LYS	63	64.484	-17.386	15.047	1.00	24.99	H
ATOM	2578	CB	LYS	63	63.689	-17.272	16.355	1.00	44.50	H
ATOM	2579	CG	LYS	63	62.501	-18.258	16.414	1.00	44.50	H
ATOM	2580	CD	LYS	63	61.202	-17.623	16.926	1.00	44.50	H
ATOM	2581	CE	LYS	63	60.096	-17.539	15.858	1.00	44.50	H
ATOM	2582	NZ	LYS	63	58.886	-16.749	16.315	1.00	44.50	H
ATOM	2583	HZ1	LYS	63	58.007	-17.155	15.926	1.00	0.00	H
ATOM	2584	HZ2	LYS	63	58.980	-15.760	15.995	1.00	0.00	H
ATOM	2585	HZ3	LYS	63	58.852	-16.759	17.353	1.00	0.00	H
ATOM	2586	C	LYS	63	63.731	-16.704	13.892	1.00	24.99	H
ATOM	2587	O	LYS	63	62.632	-17.120	13.539	1.00	44.50	H
ATOM	2588	N	PHE	64	64.317	-15.673	13.290	1.00	23.68	H
ATOM	2589	H	PHE	64	65.190	-15.381	13.609	1.00	0.00	H
ATOM	2590	CA	PHE	64	63.676	-14.980	12.158	1.00	23.68	H
ATOM	2591	CB	PHE	64	63.258	-13.565	12.550	1.00	19.87	H
ATOM	2592	CG	PHE	64	62.277	-13.528	13.649	1.00	19.87	H
ATOM	2593	CD1	PHE	64	62.668	-13.835	14.947	1.00	19.87	H
ATOM	2594	CD2	PHE	64	60.953	-13.251	13.399	1.00	19.87	H
ATOM	2595	CE1	PHE	64	61.749	-13.871	15.957	1.00	19.87	H
ATOM	2596	CE2	PHE	64	60.040	-13.284	14.408	1.00	19.87	H
ATOM	2597	CZ	PHE	64	60.432	-13.593	15.680	1.00	19.87	H
ATOM	2598	C	PHE	64	64.615	-14.912	10.933	1.00	23.68	H
ATOM	2599	O	PHE	64	64.271	-14.327	9.909	1.00	19.87	H
ATOM	2600	N	LYS	65	65.805	-15.502	11.086	1.00	33.01	H
ATOM	2601	H	LYS	65	66.005	-15.901	11.963	1.00	0.00	H
ATOM	2602	CA	LYS	65	66.830	-15.599	10.047	1.00	33.01	H
ATOM	2603	CB	LYS	65	67.676	-16.855	10.306	1.00	36.60	H
ATOM	2604	CG	LYS	65	69.007	-16.654	10.985	1.00	36.60	H
ATOM	2605	CD	LYS	65	70.121	-17.375	10.224	1.00	36.60	H
ATOM	2606	CE	LYS	65	71.428	-16.573	10.247	1.00	36.60	H
ATOM	2607	NZ	LYS	65	71.385	-15.336	9.378	1.00	36.60	H
ATOM	2608	HZ1	LYS	65	70.828	-15.511	8.524	1.00	0.00	H
ATOM	2609	HZ2	LYS	65	72.360	-15.089	9.127	1.00	0.00	H
ATOM	2610	HZ3	LYS	65	70.973	-14.568	9.945	1.00	0.00	H
ATOM	2611	C	LYS	65	66.214	-15.722	8.641	1.00	33.01	H
ATOM	2612	O	LYS	65	66.713	-15.123	7.690	1.00	36.60	H
ATOM	2613	N	SER	66	65.137	-16.506	8.509	1.00	19.00	H
ATOM	2614	H	SER	66	64.767	-16.941	9.310	1.00	0.00	H
ATOM	2615	CA	SER	66	64.502	-16.744	7.201	1.00	19.00	H
ATOM	2616	CB	SER	66	64.217	-18.233	7.007	1.00	37.01	H
ATOM	2617	OG	SER	66	65.041	-19.020	7.843	1.00	37.01	H
ATOM	2618	HG	SER	66	64.867	-19.947	7.681	1.00	0.00	H
ATOM	2619	C	SER	66	63.214	-16.001	6.948	1.00	19.00	H
ATOM	2620	O	SER	66	62.852	-15.700	5.797	1.00	37.01	H
ATOM	2621	N	LYS	67	62.509	-15.720	8.029	1.00	31.83	H
ATOM	2622	H	LYS	67	62.866	-15.984	8.906	1.00	0.00	H
ATOM	2623	CA	LYS	67	61.238	-15.033	7.933	1.00	31.83	H
ATOM	2624	CB	LYS	67	60.504	-15.086	9.269	1.00	14.35	H
ATOM	2625	CG	LYS	67	59.424	-16.163	9.352	1.00	14.35	H
ATOM	2626	CD	LYS	67	58.705	-16.432	8.039	1.00	14.35	H
ATOM	2627	CE	LYS	67	57.360	-17.100	8.301	1.00	14.35	H
ATOM	2628	NZ	LYS	67	57.283	-18.608	8.004	1.00	14.35	H
ATOM	2629	HZ1	LYS	67	57.649	-19.164	8.799	1.00	0.00	H

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ATOM	2630	HZ2 LYS	67	57.860	-18.799	7.152	1.00	0.00	H
ATOM	2631	HZ3 LYS	67	56.295	-18.857	7.810	1.00	0.00	H
ATOM	2632	C LYS	67	61.443	-13.587	7.573	1.00	31.83	H
ATOM	2633	O LYS	67	60.625	-12.995	6.872	1.00	14.35	H
ATOM	2634	N ALA	68	62.565	-13.028	8.009	1.00	16.18	H
ATOM	2635	H ALA	68	63.262	-13.580	8.443	1.00	0.00	H
ATOM	2636	CA ALA	68	62.769	-11.622	7.834	1.00	16.18	H
ATOM	2637	CB ALA	68	62.973	-11.006	9.183	1.00	19.24	H
ATOM	2638	C ALA	68	63.839	-11.168	6.915	1.00	16.18	H
ATOM	2639	O ALA	68	64.913	-11.730	6.870	1.00	19.24	H
ATOM	2640	N THR	69	63.540	-10.089	6.217	1.00	33.79	H
ATOM	2641	H THR	69	62.665	-9.672	6.343	1.00	0.00	H
ATOM	2642	CA THR	69	64.469	-9.484	5.281	1.00	33.79	H
ATOM	2643	CB THR	69	64.101	-9.863	3.804	1.00	28.40	H
ATOM	2644	OG1 THR	69	64.237	-11.285	3.617	1.00	28.40	H
ATOM	2645	HG1 THR	69	64.144	-11.491	2.680	1.00	0.00	H
ATOM	2646	CG2 THR	69	65.031	-9.183	2.827	1.00	28.40	H
ATOM	2647	C THR	69	64.417	-7.959	5.511	1.00	33.79	H
ATOM	2648	O THR	69	63.500	-7.253	5.083	1.00	28.40	H
ATOM	2649	N LEU	70	65.424	-7.462	6.200	1.00	9.11	H
ATOM	2650	H LEU	70	66.135	-8.062	6.512	1.00	0.00	H
ATOM	2651	CA LEU	70	65.502	-6.065	6.497	1.00	9.11	H
ATOM	2652	CB LEU	70	66.045	-5.857	7.924	1.00	13.08	H
ATOM	2653	CG LEU	70	65.532	-6.847	8.945	1.00	13.08	H
ATOM	2654	CD1 LEU	70	66.172	-6.606	10.311	1.00	13.08	H
ATOM	2655	CD2 LEU	70	64.008	-6.744	8.953	1.00	13.08	H
ATOM	2656	C LEU	70	66.357	-5.236	5.574	1.00	9.11	H
ATOM	2657	O LEU	70	67.559	-5.335	5.644	1.00	13.08	H
ATOM	2658	N THR	71	65.764	-4.388	4.757	1.00	20.60	H
ATOM	2659	H THR	71	64.795	-4.364	4.696	1.00	0.00	H
ATOM	2660	CA THR	71	66.566	-3.486	3.942	1.00	20.60	H
ATOM	2661	CB THR	71	66.192	-3.611	2.512	1.00	41.62	H
ATOM	2662	OG1 THR	71	64.996	-2.861	2.251	1.00	41.62	H
ATOM	2663	HG1 THR	71	65.071	-2.373	1.430	1.00	0.00	H
ATOM	2664	CG2 THR	71	65.970	-5.071	2.216	1.00	41.62	H
ATOM	2665	C THR	71	66.289	-2.048	4.401	1.00	20.60	H
ATOM	2666	O THR	71	65.559	-1.831	5.383	1.00	41.62	H
ATOM	2667	N VAL	72	66.868	-1.064	3.715	1.00	22.79	H
ATOM	2668	H VAL	72	67.467	-1.285	2.968	1.00	0.00	H
ATOM	2669	CA VAL	72	66.622	0.333	4.050	1.00	22.79	H
ATOM	2670	CB VAL	72	67.626	0.901	5.090	1.00	34.42	H
ATOM	2671	CG1 VAL	72	67.622	0.055	6.336	1.00	34.42	H
ATOM	2672	CG2 VAL	72	69.027	0.965	4.495	1.00	34.42	H
ATOM	2673	C VAL	72	66.774	1.081	2.745	1.00	22.79	H
ATOM	2674	O VAL	72	67.025	0.458	1.714	1.00	34.42	H
ATOM	2675	N ASP	73	66.605	2.406	2.798	1.00	31.86	H
ATOM	2676	H ASP	73	66.407	2.807	3.664	1.00	0.00	H
ATOM	2677	CA ASP	73	66.698	3.301	1.649	1.00	31.86	H
ATOM	2678	CB ASP	73	65.343	3.449	0.963	1.00	37.33	H
ATOM	2679	CG ASP	73	65.286	4.642	-0.011	1.00	37.33	H
ATOM	2680	OD1 ASP	73	65.941	5.703	0.197	1.00	37.33	H
ATOM	2681	OD2 ASP	73	64.552	4.508	-1.010	1.00	37.33	H
ATOM	2682	C ASP	73	67.134	4.638	2.227	1.00	31.86	H
ATOM	2683	O ASP	73	66.296	5.493	2.543	1.00	37.33	H
ATOM	2684	N LYS	74	68.441	4.825	2.362	1.00	20.80	H
ATOM	2685	H LYS	74	69.048	4.118	2.061	1.00	0.00	H

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ATOM	2686	CA	LYS	74	68.983	6.053	2.939	1.00	20.80	H
ATOM	2687	CB	LYS	74	70.481	6.101	2.706	1.00	33.70	H
ATOM	2688	CG	LYS	74	71.272	6.009	3.967	1.00	33.70	H
ATOM	2689	CD	LYS	74	72.115	4.711	3.972	1.00	33.70	H
ATOM	2690	CE	LYS	74	73.492	4.943	3.310	1.00	33.70	H
ATOM	2691	NZ	LYS	74	73.457	4.830	1.795	1.00	33.70	H
ATOM	2692	HZ1	LYS	74	74.213	4.209	1.470	1.00	0.00	H
ATOM	2693	HZ2	LYS	74	73.606	5.799	1.434	1.00	0.00	H
ATOM	2694	HZ3	LYS	74	72.525	4.486	1.515	1.00	0.00	H
ATOM	2695	C	LYS	74	68.369	7.360	2.452	1.00	20.80	H
ATOM	2696	O	LYS	74	68.146	8.314	3.214	1.00	33.70	H
ATOM	2697	N	SER	75	68.099	7.390	1.161	1.00	34.95	H
ATOM	2698	H	SER	75	68.251	6.603	0.601	1.00	0.00	H
ATOM	2699	CA	SER	75	67.561	8.579	0.556	1.00	34.95	H
ATOM	2700	CB	SER	75	67.351	8.349	-0.950	1.00	31.14	H
ATOM	2701	OG	SER	75	66.108	7.712	-1.199	1.00	31.14	H
ATOM	2702	HG	SER	75	66.159	7.270	-2.055	1.00	0.00	H
ATOM	2703	C	SER	75	66.259	8.955	1.227	1.00	34.95	H
ATOM	2704	O	SER	75	65.991	10.133	1.432	1.00	31.14	H
ATOM	2705	N	ALA	76	65.464	7.956	1.602	1.00	26.42	H
ATOM	2706	H	ALA	76	65.754	7.031	1.489	1.00	0.00	H
ATOM	2707	CA	ALA	76	64.162	8.248	2.202	1.00	26.42	H
ATOM	2708	CB	ALA	76	63.046	7.569	1.410	1.00	10.78	H
ATOM	2709	C	ALA	76	64.006	7.930	3.660	1.00	26.42	H
ATOM	2710	O	ALA	76	62.892	7.930	4.167	1.00	10.78	H
ATOM	2711	N	SER	77	65.122	7.656	4.329	1.00	37.60	H
ATOM	2712	H	SER	77	65.975	7.656	3.857	1.00	0.00	H
ATOM	2713	CA	SER	77	65.101	7.350	5.753	1.00	37.60	H
ATOM	2714	CB	SER	77	64.957	8.634	6.542	1.00	25.99	H
ATOM	2715	OG	SER	77	65.094	9.685	5.618	1.00	25.99	H
ATOM	2716	HG	SER	77	64.666	10.475	5.947	1.00	0.00	H
ATOM	2717	C	SER	77	63.924	6.479	6.008	1.00	37.60	H
ATOM	2718	O	SER	77	63.008	6.878	6.695	1.00	25.99	H
ATOM	2719	N	THR	78	63.947	5.295	5.430	1.00	23.35	H
ATOM	2720	H	THR	78	64.722	5.028	4.897	1.00	0.00	H
ATOM	2721	CA	THR	78	62.831	4.389	5.585	1.00	23.35	H
ATOM	2722	CB	THR	78	61.928	4.409	4.348	1.00	20.24	H
ATOM	2723	OG1	THR	78	61.234	5.674	4.263	1.00	20.24	H
ATOM	2724	HG1	THR	78	60.468	5.614	4.842	1.00	0.00	H
ATOM	2725	CG2	THR	78	60.939	3.250	4.423	1.00	20.24	H
ATOM	2726	C	THR	78	63.388	3.013	5.754	1.00	23.35	H
ATOM	2727	O	THR	78	64.062	2.527	4.881	1.00	20.24	H
ATOM	2728	N	ALA	79	63.140	2.400	6.893	1.00	13.63	H
ATOM	2729	H	ALA	79	62.632	2.837	7.585	1.00	0.00	H
ATOM	2730	CA	ALA	79	63.620	1.058	7.103	1.00	13.63	H
ATOM	2731	CB	ALA	79	63.793	0.784	8.597	1.00	10.19	H
ATOM	2732	C	ALA	79	62.529	0.185	6.491	1.00	13.63	H
ATOM	2733	O	ALA	79	61.367	0.580	6.486	1.00	10.19	H
ATOM	2734	N	TYR	80	62.907	-0.969	5.931	1.00	26.68	H
ATOM	2735	H	TYR	80	63.859	-1.206	5.924	1.00	0.00	H
ATOM	2736	CA	TYR	80	61.945	-1.901	5.339	1.00	26.68	H
ATOM	2737	CB	TYR	80	62.134	-1.949	3.838	1.00	30.18	H
ATOM	2738	CG	TYR	80	61.630	-0.724	3.131	1.00	30.18	H
ATOM	2739	CD1	TYR	80	60.289	-0.623	2.761	1.00	30.18	H
ATOM	2740	CE1	TYR	80	59.797	0.524	2.122	1.00	30.18	H
ATOM	2741	CD2	TYR	80	62.484	0.359	2.838	1.00	30.18	H

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ATOM	2742	CE2 TYR	80	62.000	1.519	2.196	1.00	30.18	H
ATOM	2743	CZ TYR	80	60.650	1.587	1.846	1.00	30.18	H
ATOM	2744	OH TYR	80	60.109	2.698	1.247	1.00	30.18	H
ATOM	2745	HH TYR	80	59.230	2.502	0.912	1.00	0.00	H
ATOM	2746	C TYR	80	62.159	-3.293	5.917	1.00	26.68	H
ATOM	2747	O TYR	80	63.286	-3.639	6.254	1.00	30.18	H
ATOM	2748	N MET	81	61.077	-4.059	6.077	1.00	12.52	H
ATOM	2749	H MET	81	60.204	-3.684	5.880	1.00	0.00	H
ATOM	2750	CA MET	81	61.136	-5.457	6.563	1.00	12.52	H
ATOM	2751	CB MET	81	60.655	-5.611	8.011	1.00	16.76	H
ATOM	2752	CG MET	81	60.040	-7.015	8.326	1.00	16.76	H
ATOM	2753	SD MET	81	60.424	-7.754	9.983	1.00	16.76	H
ATOM	2754	CE MET	81	59.293	-7.044	11.039	1.00	16.76	H
ATOM	2755	C MET	81	60.274	-6.311	5.648	1.00	12.52	H
ATOM	2756	O MET	81	59.207	-5.907	5.211	1.00	16.76	H
ATOM	2757	N GLU	82	60.776	-7.491	5.308	1.00	11.68	H
ATOM	2758	H GLU	82	61.661	-7.752	5.648	1.00	0.00	H
ATOM	2759	CA GLU	82	60.033	-8.412	4.449	1.00	11.68	H
ATOM	2760	CB GLU	82	60.717	-8.629	3.118	1.00	32.69	H
ATOM	2761	CG GLU	82	59.821	-9.351	2.139	1.00	32.69	H
ATOM	2762	CD GLU	82	59.886	-8.758	0.730	1.00	32.69	H
ATOM	2763	OE1 GLU	82	59.528	-7.582	0.549	1.00	32.69	H
ATOM	2764	OE2 GLU	82	60.293	-9.470	-0.204	1.00	32.69	H
ATOM	2765	C GLU	82	59.907	-9.742	5.163	1.00	11.68	H
ATOM	2766	O GLU	82	60.874	-10.301	5.710	1.00	32.69	H
ATOM	2767	N LEU	83	58.686	-10.235	5.178	1.00	18.26	H
ATOM	2768	H LEU	83	57.952	-9.757	4.749	1.00	0.00	H
ATOM	2769	CA LEU	83	58.427	-11.491	5.829	1.00	18.26	H
ATOM	2770	CB LEU	83	57.348	-11.328	6.913	1.00	20.56	H
ATOM	2771	CG LEU	83	57.676	-10.412	8.120	1.00	20.56	H
ATOM	2772	CD1 LEU	83	56.370	-9.963	8.763	1.00	20.56	H
ATOM	2773	CD2 LEU	83	58.555	-11.122	9.162	1.00	20.56	H
ATOM	2774	C LEU	83	57.999	-12.459	4.755	1.00	18.26	H
ATOM	2775	O LEU	83	57.106	-12.144	3.946	1.00	20.56	H
ATOM	2776	N SER	84	58.670	-13.621	4.769	1.00	23.03	H
ATOM	2777	H SER	84	59.348	-13.754	5.467	1.00	0.00	H
ATOM	2778	CA SER	84	58.473	-14.714	3.802	1.00	23.03	H
ATOM	2779	CB SER	84	59.792	-15.416	3.493	1.00	27.66	H
ATOM	2780	OG SER	84	59.836	-16.654	4.196	1.00	27.66	H
ATOM	2781	HG SER	84	60.649	-16.715	4.712	1.00	0.00	H
ATOM	2782	C SER	84	57.528	-15.821	4.199	1.00	23.03	H
ATOM	2783	O SER	84	57.553	-16.291	5.339	1.00	27.66	H
ATOM	2784	N SER	85	56.752	-16.267	3.217	1.00	22.77	H
ATOM	2785	H SER	85	56.807	-15.852	2.337	1.00	0.00	H
ATOM	2786	CA SER	85	55.815	-17.362	3.409	1.00	22.77	H
ATOM	2787	CB SER	85	56.593	-18.661	3.220	1.00	30.44	H
ATOM	2788	OG SER	85	57.946	-18.332	2.972	1.00	30.44	H
ATOM	2789	HG SER	85	58.460	-18.604	3.737	1.00	0.00	H
ATOM	2790	C SER	85	55.124	-17.334	4.789	1.00	22.77	H
ATOM	2791	O SER	85	55.330	-18.228	5.632	1.00	30.44	H
ATOM	2792	N LEU	86	54.268	-16.346	5.020	1.00	28.52	H
ATOM	2793	H LEU	86	54.039	-15.686	4.334	1.00	0.00	H
ATOM	2794	CA LEU	86	53.693	-16.291	6.354	1.00	28.52	H
ATOM	2795	CB LEU	86	53.093	-14.909	6.758	1.00	2.53	H
ATOM	2796	CG LEU	86	53.393	-13.604	6.030	1.00	2.53	H
ATOM	2797	CD1 LEU	86	52.218	-12.668	6.206	1.00	2.53	H

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ATOM	2798	CD2	LEU	86	54.668	-13.014	6.545	1.00	2.53	H
ATOM	2799	C	LEU	86	52.668	-17.323	6.579	1.00	28.52	H
ATOM	2800	O	LEU	86	52.055	-17.861	5.685	1.00	2.53	H
ATOM	2801	N	ARG	87	52.530	-17.597	7.844	1.00	24.02	H
ATOM	2802	H	ARG	87	53.075	-17.184	8.524	1.00	0.00	H
ATOM	2803	CA	ARG	87	51.572	-18.515	8.315	1.00	24.02	H
ATOM	2804	CB	ARG	87	52.245	-19.797	8.813	1.00	46.13	H
ATOM	2805	CG	ARG	87	53.644	-19.643	9.384	1.00	46.13	H
ATOM	2806	CD	ARG	87	54.177	-21.010	9.841	1.00	46.13	H
ATOM	2807	NE	ARG	87	54.894	-20.944	11.124	1.00	46.13	H
ATOM	2808	HE	ARG	87	55.053	-20.055	11.502	1.00	0.00	H
ATOM	2809	CZ	ARG	87	55.328	-22.006	11.799	1.00	46.13	H
ATOM	2810	NH1	ARG	87	55.120	-23.229	11.321	1.00	46.13	H
ATOM	2811	HH11	ARG	87	55.933	-23.791	11.127	1.00	0.00	H
ATOM	2812	HH12	ARG	87	54.217	-23.659	11.350	1.00	0.00	H
ATOM	2813	NH2	ARG	87	55.988	-21.847	12.939	1.00	46.13	H
ATOM	2814	HH21	ARG	87	55.568	-21.303	13.664	1.00	0.00	H
ATOM	2815	HH22	ARG	87	56.755	-22.456	13.167	1.00	0.00	H
ATOM	2816	C	ARG	87	50.938	-17.766	9.476	1.00	24.02	H
ATOM	2817	O	ARG	87	51.414	-16.720	9.924	1.00	46.13	H
ATOM	2818	N	SER	88	49.827	-18.319	9.911	1.00	33.56	H
ATOM	2819	H	SER	88	49.510	-19.124	9.442	1.00	0.00	H
ATOM	2820	CA	SER	88	49.058	-17.833	11.029	1.00	33.56	H
ATOM	2821	CB	SER	88	48.360	-19.034	11.592	1.00	33.30	H
ATOM	2822	OG	SER	88	49.344	-20.072	11.597	1.00	33.30	H
ATOM	2823	HG	SER	88	49.579	-20.298	12.497	1.00	0.00	H
ATOM	2824	C	SER	88	50.055	-17.342	12.062	1.00	33.56	H
ATOM	2825	O	SER	88	49.979	-16.226	12.523	1.00	33.30	H
ATOM	2826	N	GLU	89	50.971	-18.231	12.423	1.00	16.37	H
ATOM	2827	H	GLU	89	50.954	-19.120	12.013	1.00	0.00	H
ATOM	2828	CA	GLU	89	51.995	-17.967	13.407	1.00	16.37	H
ATOM	2829	CB	GLU	89	53.040	-19.093	13.346	1.00	32.47	H
ATOM	2830	CG	GLU	89	52.755	-20.229	14.332	1.00	32.47	H
ATOM	2831	CD	GLU	89	52.279	-21.545	13.679	1.00	32.47	H
ATOM	2832	OE1	GLU	89	51.987	-22.521	14.458	1.00	32.47	H
ATOM	2833	OE2	GLU	89	52.211	-21.589	12.407	1.00	32.47	H
ATOM	2834	C	GLU	89	52.670	-16.585	13.290	1.00	16.37	H
ATOM	2835	O	GLU	89	53.227	-16.060	14.259	1.00	32.47	H
ATOM	2836	N	ASP	90	52.632	-16.012	12.096	1.00	20.95	H
ATOM	2837	H	ASP	90	52.198	-16.512	11.389	1.00	0.00	H
ATOM	2838	CA	ASP	90	53.220	-14.702	11.831	1.00	20.95	H
ATOM	2839	CB	ASP	90	53.614	-14.631	10.369	1.00	25.91	H
ATOM	2840	CG	ASP	90	54.457	-15.805	9.960	1.00	25.91	H
ATOM	2841	OD1	ASP	90	55.205	-16.316	10.820	1.00	25.91	H
ATOM	2842	OD2	ASP	90	54.380	-16.233	8.797	1.00	25.91	H
ATOM	2843	C	ASP	90	52.269	-13.541	12.165	1.00	20.95	H
ATOM	2844	O	ASP	90	52.688	-12.379	12.231	1.00	25.91	H
ATOM	2845	N	THR	91	50.990	-13.843	12.371	1.00	18.76	H
ATOM	2846	H	THR	91	50.695	-14.762	12.298	1.00	0.00	H
ATOM	2847	CA	THR	91	50.083	-12.787	12.676	1.00	18.76	H
ATOM	2848	CB	THR	91	48.695	-13.265	12.890	1.00	9.07	H
ATOM	2849	OG1	THR	91	48.251	-13.965	11.734	1.00	9.07	H
ATOM	2850	HG1	THR	91	48.969	-14.082	11.112	1.00	0.00	H
ATOM	2851	CG2	THR	91	47.814	-12.098	13.083	1.00	9.07	H
ATOM	2852	C	THR	91	50.556	-12.070	13.907	1.00	18.76	H
ATOM	2853	O	THR	91	50.967	-12.674	14.888	1.00	9.07	H



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ATOM	2854	N	ALA	92	50.526	-10.755	13.840	1.00	12.22	H
ATOM	2855	H	ALA	92	50.196	-10.315	13.027	1.00	0.00	H
ATOM	2856	CA	ALA	92	50.984	-9.980	14.961	1.00	12.22	H
ATOM	2857	CB	ALA	92	52.314	-10.461	15.415	1.00	24.90	H
ATOM	2858	C	ALA	92	51.075	-8.542	14.598	1.00	12.22	H
ATOM	2859	O	ALA	92	50.527	-8.108	13.591	1.00	24.90	H
ATOM	2860	N	VAL	93	51.705	-7.784	15.482	1.00	10.97	H
ATOM	2861	H	VAL	93	52.023	-8.177	16.317	1.00	0.00	H
ATOM	2862	CA	VAL	93	51.910	-6.380	15.238	1.00	10.97	H
ATOM	2863	CB	VAL	93	51.457	-5.537	16.414	1.00	18.91	H
ATOM	2864	CG1	VAL	93	52.211	-4.191	16.441	1.00	18.91	H
ATOM	2865	CG2	VAL	93	49.979	-5.282	16.290	1.00	18.91	H
ATOM	2866	C	VAL	93	53.408	-6.391	15.083	1.00	10.97	H
ATOM	2867	O	VAL	93	54.118	-7.127	15.752	1.00	18.91	H
ATOM	2868	N	TYR	94	53.892	-5.623	14.136	1.00	14.06	H
ATOM	2869	H	TYR	94	53.294	-5.062	13.594	1.00	0.00	H
ATOM	2870	CA	TYR	94	55.302	-5.571	13.898	1.00	14.06	H
ATOM	2871	CB	TYR	94	55.585	-6.084	12.487	1.00	20.99	H
ATOM	2872	CG	TYR	94	55.487	-7.608	12.438	1.00	20.99	H
ATOM	2873	CD1	TYR	94	54.286	-8.262	12.140	1.00	20.99	H
ATOM	2874	CE1	TYR	94	54.184	-9.651	12.217	1.00	20.99	H
ATOM	2875	CD2	TYR	94	56.574	-8.386	12.802	1.00	20.99	H
ATOM	2876	CE2	TYR	94	56.480	-9.764	12.882	1.00	20.99	H
ATOM	2877	CZ	TYR	94	55.292	-10.402	12.592	1.00	20.99	H
ATOM	2878	OH	TYR	94	55.265	-11.785	12.685	1.00	20.99	H
ATOM	2879	HH	TYR	94	55.850	-12.176	12.043	1.00	0.00	H
ATOM	2880	C	TYR	94	55.707	-4.135	14.122	1.00	14.06	H
ATOM	2881	O	TYR	94	55.178	-3.211	13.536	1.00	20.99	H
ATOM	2882	N	TYR	95	56.621	-3.982	15.056	1.00	11.79	H
ATOM	2883	H	TYR	95	56.926	-4.802	15.472	1.00	0.00	H
ATOM	2884	CA	TYR	95	57.162	-2.705	15.470	1.00	11.79	H
ATOM	2885	CB	TYR	95	57.288	-2.692	16.981	1.00	18.08	H
ATOM	2886	CG	TYR	95	56.030	-2.464	17.686	1.00	18.08	H
ATOM	2887	CD1	TYR	95	55.333	-1.290	17.481	1.00	18.08	H
ATOM	2888	CE1	TYR	95	54.190	-1.032	18.186	1.00	18.08	H
ATOM	2889	CD2	TYR	95	55.547	-3.395	18.615	1.00	18.08	H
ATOM	2890	CE2	TYR	95	54.394	-3.149	19.331	1.00	18.08	H
ATOM	2891	CZ	TYR	95	53.713	-1.949	19.112	1.00	18.08	H
ATOM	2892	OH	TYR	95	52.563	-1.618	19.803	1.00	18.08	H
ATOM	2893	HH	TYR	95	51.831	-2.148	19.495	1.00	0.00	H
ATOM	2894	C	TYR	95	58.555	-2.456	14.969	1.00	11.79	H
ATOM	2895	O	TYR	95	59.415	-3.321	15.094	1.00	18.08	H
ATOM	2896	N	CYS	96	58.786	-1.254	14.472	1.00	23.66	H
ATOM	2897	H	CYS	96	58.039	-0.624	14.380	1.00	0.00	H
ATOM	2898	CA	CYS	96	60.131	-0.829	14.057	1.00	23.66	H
ATOM	2899	C	CYS	96	60.544	0.211	15.119	1.00	23.66	H
ATOM	2900	O	CYS	96	59.856	1.206	15.311	1.00	36.68	H
ATOM	2901	CB	CYS	96	60.112	-0.167	12.691	1.00	36.68	H
ATOM	2902	SG	CYS	96	59.593	1.562	12.799	1.00	36.68	H
ATOM	2903	N	THR	97	61.640	-0.040	15.829	1.00	9.01	H
ATOM	2904	H	THR	97	62.145	-0.860	15.642	1.00	0.00	H
ATOM	2905	CA	THR	97	62.087	0.857	16.878	1.00	9.01	H
ATOM	2906	CB	THR	97	61.841	0.241	18.325	1.00	21.11	H
ATOM	2907	OG1	THR	97	62.394	1.093	19.332	1.00	21.11	H
ATOM	2908	HG1	THR	97	62.204	0.710	20.182	1.00	0.00	H
ATOM	2909	CG2	THR	97	62.511	-1.131	18.454	1.00	21.11	H

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ATOM	2910	C	THR	97	63.562	1.190	16.748	1.00	9.01	H
ATOM	2911	O	THR	97	64.396	0.333	16.486	1.00	21.11	H
ATOM	2912	N	ARG	98	63.842	2.462	16.989	1.00	17.97	H
ATOM	2913	H	ARG	98	63.101	3.062	17.229	1.00	0.00	H
ATOM	2914	CA	ARG	98	65.154	3.030	16.890	1.00	17.97	H
ATOM	2915	CB	ARG	98	65.001	4.531	16.803	1.00	29.85	H
ATOM	2916	CG	ARG	98	66.207	5.215	16.258	1.00	29.85	H
ATOM	2917	CD	ARG	98	66.865	6.099	17.294	1.00	29.85	H
ATOM	2918	NE	ARG	98	66.923	7.481	16.833	1.00	29.85	H
ATOM	2919	HE	ARG	98	66.806	7.651	15.877	1.00	0.00	H
ATOM	2920	CZ	ARG	98	67.138	8.537	17.628	1.00	29.85	H
ATOM	2921	NH1	ARG	98	67.339	8.393	18.946	1.00	29.85	H
ATOM	2922	HH11	ARG	98	67.723	7.546	19.310	1.00	0.00	H
ATOM	2923	HH12	ARG	98	67.012	9.102	19.579	1.00	0.00	H
ATOM	2924	NH2	ARG	98	67.159	9.757	17.093	1.00	29.85	H
ATOM	2925	HH21	ARG	98	68.039	10.142	16.806	1.00	0.00	H
ATOM	2926	HH22	ARG	98	66.309	10.225	16.882	1.00	0.00	H
ATOM	2927	C	ARG	98	66.242	2.684	17.938	1.00	17.97	H
ATOM	2928	O	ARG	98	66.013	2.443	19.159	1.00	29.85	H
ATOM	2929	N	SER	99	67.449	2.692	17.385	1.00	28.85	H
ATOM	2930	H	SER	99	67.501	2.860	16.432	1.00	0.00	H
ATOM	2931	CA	SER	99	68.687	2.466	18.077	1.00	28.85	H
ATOM	2932	CB	SER	99	69.265	3.787	18.545	1.00	27.25	H
ATOM	2933	OG	SER	99	70.311	3.506	19.445	1.00	27.25	H
ATOM	2934	HG	SER	99	71.108	3.343	18.956	1.00	0.00	H
ATOM	2935	C	SER	99	68.660	1.522	19.234	1.00	28.85	H
ATOM	2936	O	SER	99	68.366	0.337	19.059	1.00	27.25	H
ATOM	2937	N	ASP	100	68.974	2.059	20.414	1.00	23.44	H
ATOM	2938	H	ASP	100	69.152	3.002	20.565	1.00	0.00	H
ATOM	2939	CA	ASP	100	69.063	1.285	21.650	1.00	23.44	H
ATOM	2940	CB	ASP	100	70.301	1.802	22.506	1.00	38.25	H
ATOM	2941	CG	ASP	100	71.353	2.740	21.713	1.00	38.25	H
ATOM	2942	OD1	ASP	100	72.405	2.242	21.204	1.00	38.25	H
ATOM	2943	OD2	ASP	100	71.159	3.988	21.668	1.00	38.25	H
ATOM	2944	C	ASP	100	67.738	1.135	22.539	1.00	23.44	H
ATOM	2945	O	ASP	100	67.789	1.025	23.791	1.00	38.25	H
ATOM	2946	N	GLY	101	66.596	1.090	21.825	1.00	14.73	H
ATOM	2947	H	GLY	101	66.690	1.167	20.847	1.00	0.00	H
ATOM	2948	CA	GLY	101	65.220	0.940	22.341	1.00	14.73	H
ATOM	2949	C	GLY	101	64.482	2.225	22.732	1.00	14.73	H
ATOM	2950	O	GLY	101	63.806	2.227	23.735	1.00	18.73	H
ATOM	2951	N	ASP	102	64.545	3.305	21.948	1.00	14.10	H
ATOM	2952	H	ASP	102	64.983	3.271	21.069	1.00	0.00	H
ATOM	2953	CA	ASP	102	63.936	4.538	22.430	1.00	14.10	H
ATOM	2954	CB	ASP	102	65.021	5.488	22.936	1.00	55.36	H
ATOM	2955	CG	ASP	102	65.843	6.126	21.799	1.00	55.36	H
ATOM	2956	OD1	ASP	102	65.595	5.837	20.599	1.00	55.36	H
ATOM	2957	OD2	ASP	102	66.752	6.925	22.128	1.00	55.36	H
ATOM	2958	C	ASP	102	62.980	5.335	21.566	1.00	14.10	H
ATOM	2959	O	ASP	102	62.764	6.526	21.811	1.00	55.36	H
ATOM	2960	N	SER	103	62.440	4.702	20.550	1.00	13.82	H
ATOM	2961	H	SER	103	62.716	3.782	20.356	1.00	0.00	H
ATOM	2962	CA	SER	103	61.450	5.336	19.701	1.00	13.82	H
ATOM	2963	CB	SER	103	62.068	6.309	18.719	1.00	30.84	H
ATOM	2964	OG	SER	103	63.261	6.825	19.265	1.00	30.84	H
ATOM	2965	HG	SER	103	63.796	7.196	18.563	1.00	0.00	H

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ATOM	2966	C	SER	103	60.876	4.147	18.972	1.00	13.82	H
ATOM	2967	O	SER	103	61.604	3.213	18.594	1.00	30.84	H
ATOM	2968	N	TRP	104	59.572	4.151	18.785	1.00	22.20	H
ATOM	2969	H	TRP	104	59.023	4.901	19.114	1.00	0.00	H
ATOM	2970	CA	TRP	104	58.965	3.032	18.110	1.00	22.20	H
ATOM	2971	CB	TRP	104	58.235	2.164	19.154	1.00	6.36	H
ATOM	2972	CG	TRP	104	59.146	1.509	20.186	1.00	6.36	H
ATOM	2973	CD2	TRP	104	59.253	0.108	20.457	1.00	6.36	H
ATOM	2974	CE2	TRP	104	60.080	-0.043	21.593	1.00	6.36	H
ATOM	2975	CE3	TRP	104	58.717	-1.034	19.851	1.00	6.36	H
ATOM	2976	CD1	TRP	104	59.913	2.139	21.141	1.00	6.36	H
ATOM	2977	NE1	TRP	104	60.479	1.202	21.996	1.00	6.36	H
ATOM	2978	HE1	TRP	104	61.070	1.421	22.746	1.00	0.00	H
ATOM	2979	CZ2	TRP	104	60.371	-1.267	22.125	1.00	6.36	H
ATOM	2980	CZ3	TRP	104	59.002	-2.257	20.377	1.00	6.36	H
ATOM	2981	CH2	TRP	104	59.826	-2.370	21.510	1.00	6.36	H
ATOM	2982	C	TRP	104	58.025	3.542	17.038	1.00	22.20	H
ATOM	2983	O	TRP	104	58.058	4.709	16.692	1.00	6.36	H
ATOM	2984	N	GLY	105	57.224	2.645	16.483	1.00	32.47	H
ATOM	2985	H	GLY	105	57.299	1.707	16.762	1.00	0.00	H
ATOM	2986	CA	GLY	105	56.250	3.027	15.473	1.00	32.47	H
ATOM	2987	C	GLY	105	54.933	2.614	16.075	1.00	32.47	H
ATOM	2988	O	GLY	105	54.963	1.954	17.099	1.00	21.23	H
ATOM	2989	N	GLN	106	53.798	3.015	15.502	1.00	21.54	H
ATOM	2990	H	GLN	106	53.837	3.597	14.716	1.00	0.00	H
ATOM	2991	CA	GLN	106	52.488	2.601	16.047	1.00	21.54	H
ATOM	2992	CB	GLN	106	51.280	3.143	15.258	1.00	35.25	H
ATOM	2993	CG	GLN	106	50.076	2.103	15.215	1.00	35.25	H
ATOM	2994	CD	GLN	106	48.914	2.319	16.292	1.00	35.25	H
ATOM	2995	OE1	GLN	106	49.163	2.434	17.511	1.00	35.25	H
ATOM	2996	NE2	GLN	106	47.659	2.361	15.812	1.00	35.25	H
ATOM	2997	HE21	GLN	106	46.905	2.152	16.385	1.00	0.00	H
ATOM	2998	HE22	GLN	106	47.570	2.621	14.860	1.00	0.00	H
ATOM	2999	C	GLN	106	52.416	1.110	15.949	1.00	21.54	H
ATOM	3000	O	GLN	106	51.741	0.473	16.733	1.00	35.25	H
ATOM	3001	N	GLY	107	53.122	0.582	14.957	1.00	23.48	H
ATOM	3002	H	GLY	107	53.627	1.175	14.362	1.00	0.00	H
ATOM	3003	CA	GLY	107	53.163	-0.837	14.734	1.00	23.48	H
ATOM	3004	C	GLY	107	52.252	-1.142	13.567	1.00	23.48	H
ATOM	3005	O	GLY	107	51.378	-0.328	13.240	1.00	17.76	H
ATOM	3006	N	THR	108	52.469	-2.295	12.935	1.00	22.92	H
ATOM	3007	H	THR	108	53.207	-2.877	13.222	1.00	0.00	H
ATOM	3008	CA	THR	108	51.656	-2.728	11.814	1.00	22.92	H
ATOM	3009	CB	THR	108	52.497	-2.850	10.536	1.00	3.61	H
ATOM	3010	OG1	THR	108	53.171	-1.606	10.275	1.00	3.61	H
ATOM	3011	HG1	THR	108	53.508	-1.267	11.100	1.00	0.00	H
ATOM	3012	CG2	THR	108	51.604	-3.188	9.367	1.00	3.61	H
ATOM	3013	C	THR	108	51.072	-4.100	12.171	1.00	22.92	H
ATOM	3014	O	THR	108	51.791	-4.992	12.621	1.00	3.61	H
ATOM	3015	N	LEU	109	49.756	-4.248	12.009	1.00	14.21	H
ATOM	3016	H	LEU	109	49.214	-3.500	11.671	1.00	0.00	H
ATOM	3017	CA	LEU	109	49.106	-5.503	12.340	1.00	14.21	H
ATOM	3018	CB	LEU	109	47.660	-5.293	12.802	1.00	14.37	H
ATOM	3019	CG	LEU	109	46.950	-6.253	13.797	1.00	14.37	H
ATOM	3020	CD1	LEU	109	45.475	-6.043	13.658	1.00	14.37	H
ATOM	3021	CD2	LEU	109	47.292	-7.761	13.599	1.00	14.37	H

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ATOM	3022	C	LEU	109	49.092	-6.266	11.068	1.00	14.21	H
ATOM	3023	O	LEU	109	48.581	-5.772	10.082	1.00	14.37	H
ATOM	3024	N	VAL	110	49.676	-7.455	11.082	1.00	4.70	H
ATOM	3025	H	VAL	110	50.084	-7.784	11.900	1.00	0.00	H
ATOM	3026	CA	VAL	110	49.731	-8.313	9.906	1.00	4.70	H
ATOM	3027	CB	VAL	110	51.176	-8.756	9.543	1.00	8.03	H
ATOM	3028	CG1	VAL	110	51.082	-9.879	8.550	1.00	8.03	H
ATOM	3029	CG2	VAL	110	51.954	-7.640	8.915	1.00	8.03	H
ATOM	3030	C	VAL	110	48.962	-9.570	10.239	1.00	4.70	H
ATOM	3031	O	VAL	110	49.431	-10.436	10.957	1.00	8.03	H
ATOM	3032	N	THR	111	47.770	-9.651	9.715	1.00	11.47	H
ATOM	3033	H	THR	111	47.435	-8.931	9.137	1.00	0.00	H
ATOM	3034	CA	THR	111	46.952	-10.797	9.994	1.00	11.47	H
ATOM	3035	CB	THR	111	45.453	-10.326	10.410	1.00	2.85	H
ATOM	3036	OG1	THR	111	44.448	-11.125	9.769	1.00	2.85	H
ATOM	3037	HG1	THR	111	44.857	-11.924	9.418	1.00	0.00	H
ATOM	3038	CG2	THR	111	45.224	-8.856	10.035	1.00	2.85	H
ATOM	3039	C	THR	111	47.084	-11.718	8.752	1.00	11.47	H
ATOM	3040	O	THR	111	46.968	-11.290	7.600	1.00	2.85	H
ATOM	3041	N	VAL	112	47.421	-12.975	9.012	1.00	21.25	H
ATOM	3042	H	VAL	112	47.562	-13.274	9.930	1.00	0.00	H
ATOM	3043	CA	VAL	112	47.603	-13.895	7.924	1.00	21.25	H
ATOM	3044	CB	VAL	112	48.745	-14.936	8.181	1.00	12.51	H
ATOM	3045	CG1	VAL	112	48.621	-16.079	7.189	1.00	12.51	H
ATOM	3046	CG2	VAL	112	50.127	-14.290	8.063	1.00	12.51	H
ATOM	3047	C	VAL	112	46.350	-14.691	7.739	1.00	21.25	H
ATOM	3048	O	VAL	112	46.060	-15.544	8.577	1.00	12.51	H
ATOM	3049	N	SER	113	45.611	-14.429	6.660	1.00	14.60	H
ATOM	3050	H	SER	113	45.864	-13.697	6.043	1.00	0.00	H
ATOM	3051	CA	SER	113	44.444	-15.231	6.417	1.00	14.60	H
ATOM	3052	CB	SER	113	43.207	-14.700	7.158	1.00	13.04	H
ATOM	3053	OG	SER	113	42.049	-15.450	6.771	1.00	13.04	H
ATOM	3054	HG	SER	113	41.318	-15.293	7.372	1.00	0.00	H
ATOM	3055	C	SER	113	44.069	-15.449	4.974	1.00	14.60	H
ATOM	3056	O	SER	113	44.359	-14.642	4.096	1.00	13.04	H
ATOM	3057	N	SER	114	43.333	-16.541	4.785	1.00	31.67	H
ATOM	3058	H	SER	114	43.111	-17.085	5.569	1.00	0.00	H
ATOM	3059	CA	SER	114	42.828	-16.971	3.479	1.00	31.67	H
ATOM	3060	CB	SER	114	42.603	-18.457	3.506	1.00	35.90	H
ATOM	3061	OG	SER	114	42.553	-18.878	4.861	1.00	35.90	H
ATOM	3062	HG	SER	114	43.442	-18.815	5.214	1.00	0.00	H
ATOM	3063	C	SER	114	41.500	-16.353	3.344	1.00	31.67	H
ATOM	3064	O	SER	114	40.841	-16.389	2.291	1.00	35.90	H
ATOM	3065	N	ALA	115	41.052	-16.011	4.541	1.00	24.28	H
ATOM	3066	H	ALA	115	41.671	-16.088	5.309	1.00	0.00	H
ATOM	3067	CA	ALA	115	39.757	-15.377	4.561	1.00	24.28	H
ATOM	3068	CB	ALA	115	39.341	-15.058	5.942	1.00	24.04	H
ATOM	3069	C	ALA	115	39.824	-14.109	3.724	1.00	24.28	H
ATOM	3070	O	ALA	115	40.901	-13.638	3.329	1.00	24.04	H
ATOM	3071	N	SER	116	38.666	-13.531	3.471	1.00	31.88	H
ATOM	3072	H	SER	116	37.840	-13.908	3.841	1.00	0.00	H
ATOM	3073	CA	SER	116	38.633	-12.327	2.636	1.00	31.88	H
ATOM	3074	CB	SER	116	37.647	-12.520	1.472	1.00	30.48	H
ATOM	3075	OG	SER	116	36.519	-13.328	1.834	1.00	30.48	H
ATOM	3076	HG	SER	116	35.984	-12.809	2.438	1.00	0.00	H
ATOM	3077	C	SER	116	38.356	-10.978	3.275	1.00	31.88	H

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ATOM	3078	O	SER	116	37.524	-10.815	4.174	1.00	30.48	H
ATOM	3079	N	THR	117	39.073	-9.995	2.767	1.00	16.25	H
ATOM	3080	H	THR	117	39.734	-10.202	2.078	1.00	0.00	H
ATOM	3081	CA	THR	117	38.907	-8.634	3.229	1.00	16.25	H
ATOM	3082	CB	THR	117	39.753	-7.674	2.416	1.00	28.17	H
ATOM	3083	OG1	THR	117	41.080	-8.175	2.342	1.00	28.17	H
ATOM	3084	HG1	THR	117	41.163	-8.785	1.598	1.00	0.00	H
ATOM	3085	CG2	THR	117	39.762	-6.310	3.054	1.00	28.17	H
ATOM	3086	C	THR	117	37.484	-8.181	3.052	1.00	16.25	H
ATOM	3087	O	THR	117	36.890	-8.394	2.009	1.00	28.17	H
ATOM	3088	N	LYS	118	36.916	-7.581	4.076	1.00	8.63	H
ATOM	3089	H	LYS	118	37.389	-7.515	4.933	1.00	0.00	H
ATOM	3090	CA	LYS	118	35.584	-7.019	3.956	1.00	8.63	H
ATOM	3091	CB	LYS	118	34.478	-7.891	4.485	1.00	14.87	H
ATOM	3092	CG	LYS	118	33.183	-7.415	3.876	1.00	14.87	H
ATOM	3093	CD	LYS	118	31.967	-7.744	4.748	1.00	14.87	H
ATOM	3094	CE	LYS	118	30.687	-7.890	3.902	1.00	14.87	H
ATOM	3095	NZ	LYS	118	30.292	-6.580	3.322	1.00	14.87	H
ATOM	3096	HZ1	LYS	118	30.730	-5.791	3.822	1.00	0.00	H
ATOM	3097	HZ2	LYS	118	29.253	-6.519	3.385	1.00	0.00	H
ATOM	3098	HZ3	LYS	118	30.544	-6.570	2.305	1.00	0.00	H
ATOM	3099	C	LYS	118	35.571	-5.765	4.735	1.00	8.63	H
ATOM	3100	O	LYS	118	36.179	-5.674	5.789	1.00	14.87	H
ATOM	3101	N	GLY	119	34.875	-4.778	4.197	1.00	27.41	H
ATOM	3102	H	GLY	119	34.404	-4.926	3.344	1.00	0.00	H
ATOM	3103	CA	GLY	119	34.780	-3.500	4.854	1.00	27.41	H
ATOM	3104	C	GLY	119	33.528	-3.515	5.695	1.00	27.41	H
ATOM	3105	O	GLY	119	32.535	-4.190	5.366	1.00	26.85	H
ATOM	3106	N	PRO	120	33.547	-2.764	6.798	1.00	9.14	H
ATOM	3107	CD	PRO	120	34.671	-1.912	7.227	1.00	24.91	H
ATOM	3108	CA	PRO	120	32.431	-2.651	7.739	1.00	9.14	H
ATOM	3109	CB	PRO	120	33.086	-2.059	8.935	1.00	24.91	H
ATOM	3110	CG	PRO	120	34.059	-1.080	8.275	1.00	24.91	H
ATOM	3111	C	PRO	120	31.367	-1.687	7.258	1.00	9.14	H
ATOM	3112	O	PRO	120	31.668	-0.782	6.514	1.00	24.91	H
ATOM	3113	N	SER	121	30.127	-1.892	7.660	1.00	8.70	H
ATOM	3114	H	SER	121	29.907	-2.701	8.166	1.00	0.00	H
ATOM	3115	CA	SER	121	29.096	-0.927	7.351	1.00	8.70	H
ATOM	3116	CB	SER	121	27.719	-1.537	7.385	1.00	34.04	H
ATOM	3117	OG	SER	121	27.730	-2.790	6.750	1.00	34.04	H
ATOM	3118	HG	SER	121	26.993	-2.833	6.134	1.00	0.00	H
ATOM	3119	C	SER	121	29.256	-0.068	8.587	1.00	8.70	H
ATOM	3120	O	SER	121	29.732	-0.560	9.598	1.00	34.04	H
ATOM	3121	N	VAL	122	28.909	1.211	8.522	1.00	16.26	H
ATOM	3122	H	VAL	122	28.562	1.590	7.683	1.00	0.00	H
ATOM	3123	CA	VAL	122	29.039	2.044	9.708	1.00	16.26	H
ATOM	3124	CB	VAL	122	30.085	3.166	9.500	1.00	8.99	H
ATOM	3125	CG1	VAL	122	30.389	3.864	10.791	1.00	8.99	H
ATOM	3126	CG2	VAL	122	31.331	2.600	9.004	1.00	8.99	H
ATOM	3127	C	VAL	122	27.695	2.651	10.124	1.00	16.26	H
ATOM	3128	O	VAL	122	27.116	3.382	9.364	1.00	8.99	H
ATOM	3129	N	PHE	123	27.189	2.370	11.319	1.00	25.63	H
ATOM	3130	H	PHE	123	27.638	1.797	11.954	1.00	0.00	H
ATOM	3131	CA	PHE	123	25.909	2.972	11.667	1.00	25.63	H
ATOM	3132	CB	PHE	123	24.942	1.883	12.055	1.00	20.28	H
ATOM	3133	CG	PHE	123	24.696	0.938	10.943	1.00	20.28	H

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ATOM	3134	CD1 PHE	123	24.037	1.378	9.785	1.00	20.28	H
ATOM	3135	CD2 PHE	123	25.145	-0.381	11.008	1.00	20.28	H
ATOM	3136	CE1 PHE	123	23.827	0.523	8.718	1.00	20.28	H
ATOM	3137	CE2 PHE	123	24.926	-1.247	9.920	1.00	20.28	H
ATOM	3138	CZ PHE	123	24.270	-0.789	8.786	1.00	20.28	H
ATOM	3139	C PHE	123	25.950	4.081	12.707	1.00	25.63	H
ATOM	3140	O PHE	123	26.828	4.120	13.539	1.00	20.28	H
ATOM	3141	N PRO	124	25.004	5.026	12.640	1.00	17.19	H
ATOM	3142	CD PRO	124	23.869	5.190	11.726	1.00	4.28	H
ATOM	3143	CA PRO	124	25.035	6.094	13.621	1.00	17.19	H
ATOM	3144	CB PRO	124	24.084	7.134	13.040	1.00	4.28	H
ATOM	3145	CG PRO	124	23.745	6.632	11.665	1.00	4.28	H
ATOM	3146	C PRO	124	24.514	5.526	14.894	1.00	17.19	H
ATOM	3147	O PRO	124	23.944	4.470	14.892	1.00	4.28	H
ATOM	3148	N LEU	125	24.678	6.236	15.986	1.00	19.50	H
ATOM	3149	H LEU	125	25.138	7.107	15.936	1.00	0.00	H
ATOM	3150	CA LEU	125	24.171	5.748	17.242	1.00	19.50	H
ATOM	3151	CB LEU	125	25.257	4.919	17.910	1.00	14.01	H
ATOM	3152	CG LEU	125	25.063	3.598	18.689	1.00	14.01	H
ATOM	3153	CD1 LEU	125	24.863	2.370	17.824	1.00	14.01	H
ATOM	3154	CD2 LEU	125	26.328	3.340	19.473	1.00	14.01	H
ATOM	3155	C LEU	125	23.729	6.914	18.145	1.00	19.50	H
ATOM	3156	O LEU	125	24.601	7.534	18.732	1.00	14.01	H
ATOM	3157	N GLY	126	22.404	7.240	18.168	1.00	17.68	H
ATOM	3158	H GLY	126	21.837	6.780	17.519	1.00	0.00	H
ATOM	3159	CA GLY	126	21.740	8.231	19.070	1.00	17.68	H
ATOM	3160	C GLY	126	22.217	9.585	19.618	1.00	17.68	H
ATOM	3161	O GLY	126	22.179	10.542	18.876	1.00	35.91	H
ATOM	3162	N THR	127	22.663	9.727	20.868	1.00	35.90	H
ATOM	3163	H THR	127	22.711	8.966	21.471	1.00	0.00	H
ATOM	3164	CA THR	127	23.120	11.071	21.330	1.00	35.90	H
ATOM	3165	CB THR	127	22.062	12.031	20.924	1.00	15.91	H
ATOM	3166	OG1 THR	127	20.904	11.257	20.517	1.00	15.91	H
ATOM	3167	HG1 THR	127	20.132	11.823	20.612	1.00	0.00	H
ATOM	3168	CG2 THR	127	22.567	12.896	19.772	1.00	15.91	H
ATOM	3169	C THR	127	23.545	11.298	22.838	1.00	35.90	H
ATOM	3170	O THR	127	23.299	10.377	23.660	1.00	15.91	H
ATOM	3171	N ALA	128	24.125	12.497	23.177	1.00	27.02	H
ATOM	3172	H ALA	128	24.181	13.172	22.457	1.00	0.00	H
ATOM	3173	CA ALA	128	24.712	12.921	24.526	1.00	27.02	H
ATOM	3174	CB ALA	128	23.711	13.185	25.553	1.00	2.00	H
ATOM	3175	C ALA	128	25.697	11.870	25.011	1.00	27.02	H
ATOM	3176	O ALA	128	26.633	12.125	25.723	1.00	2.00	H
ATOM	3177	N ALA	129	25.395	10.655	24.642	1.00	2.00	H
ATOM	3178	H ALA	129	24.555	10.509	24.288	1.00	0.00	H
ATOM	3179	CA ALA	129	26.255	9.542	24.780	1.00	2.00	H
ATOM	3180	CB ALA	129	25.658	8.437	25.617	1.00	10.42	H
ATOM	3181	C ALA	129	25.896	9.304	23.318	1.00	2.00	H
ATOM	3182	O ALA	129	24.719	9.273	22.987	1.00	10.42	H
ATOM	3183	N LEU	130	26.853	9.203	22.413	1.00	26.62	H
ATOM	3184	H LEU	130	27.791	9.354	22.635	1.00	0.00	H
ATOM	3185	CA LEU	130	26.468	8.875	21.049	1.00	26.62	H
ATOM	3186	CB LEU	130	26.065	10.147	20.274	1.00	8.98	H
ATOM	3187	CG LEU	130	26.875	11.431	20.328	1.00	8.98	H
ATOM	3188	CD1 LEU	130	27.837	11.433	19.149	1.00	8.98	H
ATOM	3189	CD2 LEU	130	25.978	12.663	20.288	1.00	8.98	H

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ATOM	3190	C	LEU	130	27.621	8.088	20.388	1.00	26.62	H
ATOM	3191	O	LEU	130	28.647	7.751	21.045	1.00	8.98	H
ATOM	3192	N	GLY	131	27.470	7.760	19.110	1.00	14.74	H
ATOM	3193	H	GLY	131	26.664	8.026	18.613	1.00	0.00	H
ATOM	3194	CA	GLY	131	28.530	7.019	18.464	1.00	14.74	H
ATOM	3195	C	GLY	131	28.257	6.354	17.151	1.00	14.74	H
ATOM	3196	O	GLY	131	27.294	6.654	16.493	1.00	15.90	H
ATOM	3197	N	CYS	132	29.147	5.441	16.797	1.00	4.08	H
ATOM	3198	H	CYS	132	29.894	5.265	17.404	1.00	0.00	H
ATOM	3199	CA	CYS	132	29.089	4.675	15.555	1.00	4.08	H
ATOM	3200	C	CYS	132	29.289	3.186	15.777	1.00	4.08	H
ATOM	3201	O	CYS	132	30.152	2.737	16.551	1.00	17.95	H
ATOM	3202	CB	CYS	132	30.138	5.183	14.567	1.00	17.95	H
ATOM	3203	SG	CYS	132	29.771	6.893	14.087	1.00	17.95	H
ATOM	3204	N	LEU	133	28.445	2.413	15.120	1.00	2.00	H
ATOM	3205	H	LEU	133	27.750	2.820	14.569	1.00	0.00	H
ATOM	3206	CA	LEU	133	28.522	0.995	15.202	1.00	2.00	H
ATOM	3207	CB	LEU	133	27.118	0.425	15.269	1.00	10.63	H
ATOM	3208	CG	LEU	133	27.184	-1.096	15.397	1.00	10.63	H
ATOM	3209	CD1	LEU	133	27.769	-1.485	16.789	1.00	10.63	H
ATOM	3210	CD2	LEU	133	25.789	-1.657	15.170	1.00	10.63	H
ATOM	3211	C	LEU	133	29.206	0.615	13.915	1.00	2.00	H
ATOM	3212	O	LEU	133	28.672	0.832	12.846	1.00	10.63	H
ATOM	3213	N	VAL	134	30.402	0.067	14.036	1.00	18.80	H
ATOM	3214	H	VAL	134	30.777	-0.066	14.929	1.00	0.00	H
ATOM	3215	CA	VAL	134	31.201	-0.358	12.893	1.00	18.80	H
ATOM	3216	CB	VAL	134	32.680	-0.002	13.152	1.00	8.71	H
ATOM	3217	CG1	VAL	134	33.587	-0.368	11.982	1.00	8.71	H
ATOM	3218	CG2	VAL	134	32.752	1.506	13.437	1.00	8.71	H
ATOM	3219	C	VAL	134	30.987	-1.859	12.823	1.00	18.80	H
ATOM	3220	O	VAL	134	31.552	-2.608	13.597	1.00	8.71	H
ATOM	3221	N	LYS	135	30.194	-2.280	11.855	1.00	2.00	H
ATOM	3222	H	LYS	135	29.850	-1.632	11.215	1.00	0.00	H
ATOM	3223	CA	LYS	135	29.817	-3.660	11.721	1.00	2.00	H
ATOM	3224	CB	LYS	135	28.273	-3.762	11.682	1.00	10.66	H
ATOM	3225	CG	LYS	135	27.707	-4.938	12.405	1.00	10.66	H
ATOM	3226	CD	LYS	135	26.373	-5.408	11.886	1.00	10.66	H
ATOM	3227	CE	LYS	135	26.118	-6.849	12.444	1.00	10.66	H
ATOM	3228	NZ	LYS	135	25.156	-7.797	11.711	1.00	10.66	H
ATOM	3229	HZ1	LYS	135	25.609	-8.730	11.668	1.00	0.00	H
ATOM	3230	HZ2	LYS	135	24.974	-7.439	10.757	1.00	0.00	H
ATOM	3231	HZ3	LYS	135	24.244	-7.880	12.226	1.00	0.00	H
ATOM	3232	C	LYS	135	30.362	-4.464	10.581	1.00	2.00	H
ATOM	3233	O	LYS	135	30.592	-3.950	9.493	1.00	10.66	H
ATOM	3234	N	ASP	136	30.511	-5.761	10.867	1.00	22.33	H
ATOM	3235	H	ASP	136	30.316	-6.040	11.789	1.00	0.00	H
ATOM	3236	CA	ASP	136	30.954	-6.787	9.923	1.00	22.33	H
ATOM	3237	CB	ASP	136	29.760	-7.272	9.102	1.00	13.68	H
ATOM	3238	CG	ASP	136	28.607	-7.761	9.960	1.00	13.68	H
ATOM	3239	OD1	ASP	136	28.794	-8.090	11.143	1.00	13.68	H
ATOM	3240	OD2	ASP	136	27.478	-7.832	9.436	1.00	13.68	H
ATOM	3241	C	ASP	136	32.136	-6.516	8.971	1.00	22.33	H
ATOM	3242	O	ASP	136	31.968	-6.263	7.763	1.00	13.68	H
ATOM	3243	N	TYR	137	33.339	-6.614	9.517	1.00	4.95	H
ATOM	3244	H	TYR	137	33.423	-6.828	10.476	1.00	0.00	H
ATOM	3245	CA	TYR	137	34.533	-6.410	8.725	1.00	4.95	H

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ATOM	3246	CB	TYR	137	35.045	-5.014	8.911	1.00	4.86	H
ATOM	3247	CG	TYR	137	35.437	-4.792	10.333	1.00	4.86	H
ATOM	3248	CD1	TYR	137	36.768	-4.862	10.726	1.00	4.86	H
ATOM	3249	CE1	TYR	137	37.123	-4.629	12.038	1.00	4.86	H
ATOM	3250	CD2	TYR	137	34.477	-4.495	11.284	1.00	4.86	H
ATOM	3251	CE2	TYR	137	34.821	-4.270	12.573	1.00	4.86	H
ATOM	3252	CZ	TYR	137	36.125	-4.335	12.953	1.00	4.86	H
ATOM	3253	OH	TYR	137	36.405	-4.132	14.260	1.00	4.86	H
ATOM	3254	HH	TYR	137	35.747	-4.598	14.788	1.00	0.00	H
ATOM	3255	C	TYR	137	35.608	-7.349	9.189	1.00	4.95	H
ATOM	3256	O	TYR	137	35.603	-7.832	10.285	1.00	4.86	H
ATOM	3257	N	PHE	138	36.567	-7.535	8.321	1.00	2.24	H
ATOM	3258	H	PHE	138	36.522	-7.072	7.461	1.00	0.00	H
ATOM	3259	CA	PHE	138	37.690	-8.403	8.559	1.00	2.24	H
ATOM	3260	CB	PHE	138	37.285	-9.842	8.243	1.00	3.76	H
ATOM	3261	CG	PHE	138	38.360	-10.849	8.495	1.00	3.76	H
ATOM	3262	CD1	PHE	138	39.414	-11.010	7.586	1.00	3.76	H
ATOM	3263	CD2	PHE	138	38.328	-11.645	9.651	1.00	3.76	H
ATOM	3264	CE1	PHE	138	40.439	-11.972	7.834	1.00	3.76	H
ATOM	3265	CE2	PHE	138	39.309	-12.579	9.909	1.00	3.76	H
ATOM	3266	CZ	PHE	138	40.367	-12.760	9.018	1.00	3.76	H
ATOM	3267	C	PHE	138	38.804	-7.999	7.647	1.00	2.24	H
ATOM	3268	O	PHE	138	38.584	-7.481	6.572	1.00	3.76	H
ATOM	3269	N	PRO	139	40.027	-8.112	8.112	1.00	3.07	H
ATOM	3270	CD	PRO	139	41.285	-7.788	7.398	1.00	8.60	H
ATOM	3271	CA	PRO	139	40.300	-8.578	9.443	1.00	3.07	H
ATOM	3272	CB	PRO	139	41.638	-9.276	9.289	1.00	8.60	H
ATOM	3273	CG	PRO	139	42.364	-8.413	8.274	1.00	8.60	H
ATOM	3274	C	PRO	139	40.400	-7.236	10.179	1.00	3.07	H
ATOM	3275	O	PRO	139	39.733	-6.264	9.806	1.00	8.60	H
ATOM	3276	N	GLU	140	41.252	-7.188	11.194	1.00	12.02	H
ATOM	3277	H	GLU	140	41.785	-7.988	11.409	1.00	0.00	H
ATOM	3278	CA	GLU	140	41.423	-6.001	12.000	1.00	12.02	H
ATOM	3279	CB	GLU	140	41.711	-6.403	13.448	1.00	2.00	H
ATOM	3280	CG	GLU	140	40.541	-6.973	14.235	1.00	2.00	H
ATOM	3281	CD	GLU	140	40.799	-6.863	15.731	1.00	2.00	H
ATOM	3282	OE1	GLU	140	40.752	-7.895	16.443	1.00	2.00	H
ATOM	3283	OE2	GLU	140	41.073	-5.719	16.190	1.00	2.00	H
ATOM	3284	C	GLU	140	42.562	-5.140	11.480	1.00	12.02	H
ATOM	3285	O	GLU	140	43.404	-5.576	10.726	1.00	2.00	H
ATOM	3286	N	PRO	141	42.633	-3.908	11.924	1.00	18.13	H
ATOM	3287	CD	PRO	141	43.822	-3.090	11.704	1.00	9.98	H
ATOM	3288	CA	PRO	141	41.745	-3.250	12.850	1.00	18.13	H
ATOM	3289	CB	PRO	141	42.705	-2.632	13.813	1.00	9.98	H
ATOM	3290	CG	PRO	141	43.806	-2.198	12.938	1.00	9.98	H
ATOM	3291	C	PRO	141	40.988	-2.185	12.131	1.00	18.13	H
ATOM	3292	O	PRO	141	41.372	-1.766	11.033	1.00	9.98	H
ATOM	3293	N	VAL	142	39.907	-1.748	12.763	1.00	2.27	H
ATOM	3294	H	VAL	142	39.651	-2.179	13.603	1.00	0.00	H
ATOM	3295	CA	VAL	142	39.074	-0.662	12.250	1.00	2.27	H
ATOM	3296	CB	VAL	142	37.572	-0.925	12.551	1.00	17.64	H
ATOM	3297	CG1	VAL	142	36.951	0.263	13.227	1.00	17.64	H
ATOM	3298	CG2	VAL	142	36.821	-1.245	11.308	1.00	17.64	H
ATOM	3299	C	VAL	142	39.571	0.447	13.177	1.00	2.27	H
ATOM	3300	O	VAL	142	39.788	0.243	14.369	1.00	17.64	H
ATOM	3301	N	THR	143	39.794	1.623	12.640	1.00	4.49	H



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ATOM	3302	H	THR	143	39.687	1.793	11.707	1.00	0.00	H
ATOM	3303	CA	THR	143	40.211	2.687	13.499	1.00	4.49	H
ATOM	3304	CB	THR	143	41.478	3.301	12.995	1.00	5.35	H
ATOM	3305	OG1	THR	143	42.222	3.793	14.101	1.00	5.35	H
ATOM	3306	HG1	THR	143	42.829	4.471	13.780	1.00	0.00	H
ATOM	3307	CG2	THR	143	41.185	4.411	12.031	1.00	5.35	H
ATOM	3308	C	THR	143	39.069	3.671	13.543	1.00	4.49	H
ATOM	3309	O	THR	143	38.241	3.720	12.640	1.00	5.35	H
ATOM	3310	N	VAL	144	38.993	4.427	14.621	1.00	9.79	H
ATOM	3311	H	VAL	144	39.654	4.362	15.344	1.00	0.00	H
ATOM	3312	CA	VAL	144	37.894	5.352	14.736	1.00	9.79	H
ATOM	3313	CB	VAL	144	36.729	4.753	15.557	1.00	6.99	H
ATOM	3314	CG1	VAL	144	35.587	5.761	15.634	1.00	6.99	H
ATOM	3315	CG2	VAL	144	36.283	3.449	14.947	1.00	6.99	H
ATOM	3316	C	VAL	144	38.252	6.675	15.347	1.00	9.79	H
ATOM	3317	O	VAL	144	38.723	6.749	16.461	1.00	6.99	H
ATOM	3318	N	SER	145	37.993	7.722	14.588	1.00	2.82	H
ATOM	3319	H	SER	145	37.617	7.591	13.700	1.00	0.00	H
ATOM	3320	CA	SER	145	38.234	9.052	15.024	1.00	2.82	H
ATOM	3321	CB	SER	145	39.098	9.712	14.030	1.00	2.00	H
ATOM	3322	OG	SER	145	39.932	10.546	14.767	1.00	2.00	H
ATOM	3323	HG	SER	145	39.831	10.337	15.705	1.00	0.00	H
ATOM	3324	C	SER	145	36.954	9.843	15.139	1.00	2.82	H
ATOM	3325	O	SER	145	35.986	9.511	14.503	1.00	2.00	H
ATOM	3326	N	TRP	146	36.973	10.890	15.956	1.00	2.00	H
ATOM	3327	H	TRP	146	37.796	11.058	16.484	1.00	0.00	H
ATOM	3328	CA	TRP	146	35.831	11.804	16.102	1.00	2.00	H
ATOM	3329	CB	TRP	146	35.217	11.742	17.514	1.00	9.36	H
ATOM	3330	CG	TRP	146	34.445	10.523	17.791	1.00	9.36	H
ATOM	3331	CD2	TRP	146	33.084	10.238	17.435	1.00	9.36	H
ATOM	3332	CE2	TRP	146	32.804	8.912	17.861	1.00	9.36	H
ATOM	3333	CE3	TRP	146	32.074	10.962	16.808	1.00	9.36	H
ATOM	3334	CD1	TRP	146	34.919	9.417	18.390	1.00	9.36	H
ATOM	3335	NE1	TRP	146	33.943	8.423	18.440	1.00	9.36	H
ATOM	3336	HE1	TRP	146	34.079	7.541	18.816	1.00	0.00	H
ATOM	3337	CZ2	TRP	146	31.559	8.293	17.664	1.00	9.36	H
ATOM	3338	CZ3	TRP	146	30.833	10.343	16.610	1.00	9.36	H
ATOM	3339	CH2	TRP	146	30.590	9.020	17.042	1.00	9.36	H
ATOM	3340	C	TRP	146	36.189	13.272	15.762	1.00	2.00	H
ATOM	3341	O	TRP	146	37.045	13.909	16.405	1.00	9.36	H
ATOM	3342	N	ASN	147	35.497	13.797	14.740	1.00	16.76	H
ATOM	3343	H	ASN	147	34.838	13.223	14.309	1.00	0.00	H
ATOM	3344	CA	ASN	147	35.655	15.166	14.225	1.00	16.76	H
ATOM	3345	CB	ASN	147	35.174	16.193	15.241	1.00	3.93	H
ATOM	3346	CG	ASN	147	33.652	16.272	15.287	1.00	3.93	H
ATOM	3347	OD1	ASN	147	32.999	15.814	14.415	1.00	3.93	H
ATOM	3348	ND2	ASN	147	33.111	16.842	16.309	1.00	3.93	H
ATOM	3349	HD21	ASN	147	33.624	17.504	16.822	1.00	0.00	H
ATOM	3350	HD22	ASN	147	32.199	16.589	16.542	1.00	0.00	H
ATOM	3351	C	ASN	147	37.085	15.382	13.871	1.00	16.76	H
ATOM	3352	O	ASN	147	37.711	16.371	14.226	1.00	3.93	H
ATOM	3353	N	SER	148	37.606	14.388	13.178	1.00	8.82	H
ATOM	3354	H	SER	148	37.032	13.623	12.984	1.00	0.00	H
ATOM	3355	CA	SER	148	38.967	14.388	12.714	1.00	8.82	H
ATOM	3356	CB	SER	148	39.118	15.503	11.700	1.00	24.82	H
ATOM	3357	OG	SER	148	38.105	15.395	10.725	1.00	24.82	H

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ATOM	3358	HG	SER	148	37.376	14.859	11.060	1.00	0.00	H
ATOM	3359	C	SER	148	39.985	14.503	13.826	1.00	8.82	H
ATOM	3360	O	SER	148	41.062	15.079	13.655	1.00	24.82	H
ATOM	3361	N	GLY	149	39.652	13.977	14.993	1.00	2.00	H
ATOM	3362	H	GLY	149	38.760	13.580	15.132	1.00	0.00	H
ATOM	3363	CA	GLY	149	40.605	14.018	16.084	1.00	2.00	H
ATOM	3364	C	GLY	149	40.586	15.231	16.970	1.00	2.00	H
ATOM	3365	O	GLY	149	41.367	15.334	17.919	1.00	23.25	H
ATOM	3366	N	ALA	150	39.721	16.169	16.670	1.00	30.14	H
ATOM	3367	H	ALA	150	39.118	16.071	15.907	1.00	0.00	H
ATOM	3368	CA	ALA	150	39.666	17.354	17.497	1.00	30.14	H
ATOM	3369	CB	ALA	150	39.042	18.520	16.707	1.00	17.12	H
ATOM	3370	C	ALA	150	38.821	17.036	18.738	1.00	30.14	H
ATOM	3371	O	ALA	150	38.694	17.864	19.653	1.00	17.12	H
ATOM	3372	N	LEU	151	38.228	15.845	18.733	1.00	11.27	H
ATOM	3373	H	LEU	151	38.380	15.252	17.961	1.00	0.00	H
ATOM	3374	CA	LEU	151	37.365	15.387	19.801	1.00	11.27	H
ATOM	3375	CB	LEU	151	35.899	15.287	19.297	1.00	2.07	H
ATOM	3376	CG	LEU	151	34.908	14.446	20.144	1.00	2.07	H
ATOM	3377	CD1	LEU	151	35.022	15.006	21.528	1.00	2.07	H
ATOM	3378	CD2	LEU	151	33.413	14.478	19.686	1.00	2.07	H
ATOM	3379	C	LEU	151	37.883	14.040	20.270	1.00	11.27	H
ATOM	3380	O	LEU	151	37.842	13.046	19.564	1.00	2.07	H
ATOM	3381	N	THR	152	38.387	14.022	21.492	1.00	15.83	H
ATOM	3382	H	THR	152	38.397	14.845	22.020	1.00	0.00	H
ATOM	3383	CA	THR	152	38.920	12.796	22.054	1.00	15.83	H
ATOM	3384	CB	THR	152	40.497	12.766	21.918	1.00	17.89	H
ATOM	3385	OG1	THR	152	41.105	13.720	22.794	1.00	17.89	H
ATOM	3386	HG1	THR	152	40.954	14.614	22.475	1.00	0.00	H
ATOM	3387	CG2	THR	152	40.918	13.106	20.502	1.00	17.89	H
ATOM	3388	C	THR	152	38.470	12.630	23.504	1.00	15.83	H
ATOM	3389	O	THR	152	38.323	11.523	24.024	1.00	17.89	H
ATOM	3390	N	SER	153	38.245	13.741	24.166	1.00	6.13	H
ATOM	3391	H	SER	153	38.373	14.613	23.741	1.00	0.00	H
ATOM	3392	CA	SER	153	37.796	13.645	25.530	1.00	6.13	H
ATOM	3393	CB	SER	153	37.684	15.032	26.147	1.00	6.80	H
ATOM	3394	OG	SER	153	38.241	15.067	27.436	1.00	6.80	H
ATOM	3395	HG	SER	153	38.334	15.968	27.731	1.00	0.00	H
ATOM	3396	C	SER	153	36.443	12.960	25.477	1.00	6.13	H
ATOM	3397	O	SER	153	35.634	13.247	24.581	1.00	6.80	H
ATOM	3398	N	GLY	154	36.236	12.048	26.426	1.00	9.52	H
ATOM	3399	H	GLY	154	36.957	11.891	27.078	1.00	0.00	H
ATOM	3400	CA	GLY	154	35.012	11.291	26.518	1.00	9.52	H
ATOM	3401	C	GLY	154	34.829	10.160	25.497	1.00	9.52	H
ATOM	3402	O	GLY	154	33.753	9.530	25.384	1.00	9.27	H
ATOM	3403	N	VAL	155	35.870	9.852	24.750	1.00	13.65	H
ATOM	3404	H	VAL	155	36.737	10.314	24.835	1.00	0.00	H
ATOM	3405	CA	VAL	155	35.653	8.813	23.798	1.00	13.65	H
ATOM	3406	CB	VAL	155	36.412	9.125	22.524	1.00	8.63	H
ATOM	3407	CG1	VAL	155	36.364	7.980	21.558	1.00	8.63	H
ATOM	3408	CG2	VAL	155	35.814	10.302	21.917	1.00	8.63	H
ATOM	3409	C	VAL	155	35.985	7.426	24.296	1.00	13.65	H
ATOM	3410	O	VAL	155	36.886	7.250	25.096	1.00	8.63	H
ATOM	3411	N	HIS	156	35.219	6.442	23.835	1.00	7.26	H
ATOM	3412	H	HIS	156	34.460	6.650	23.261	1.00	0.00	H
ATOM	3413	CA	HIS	156	35.502	5.061	24.142	1.00	7.26	H

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ATOM	3414	CB	HIS	156	34.552	4.480	25.151	1.00	3.40	H
ATOM	3415	CG	HIS	156	34.735	5.025	26.508	1.00	3.40	H
ATOM	3416	CD2	HIS	156	33.842	5.335	27.473	1.00	3.40	H
ATOM	3417	ND1	HIS	156	35.967	5.392	26.990	1.00	3.40	H
ATOM	3418	HD1	HIS	156	36.822	5.288	26.512	1.00	0.00	H
ATOM	3419	CE1	HIS	156	35.824	5.913	28.195	1.00	3.40	H
ATOM	3420	NE2	HIS	156	34.546	5.888	28.509	1.00	3.40	H
ATOM	3421	HE2	HIS	156	34.155	6.214	29.338	1.00	0.00	H
ATOM	3422	C	HIS	156	35.331	4.268	22.881	1.00	7.26	H
ATOM	3423	O	HIS	156	34.202	4.129	22.399	1.00	3.40	H
ATOM	3424	N	THR	157	36.425	3.795	22.290	1.00	11.20	H
ATOM	3425	H	THR	157	37.336	4.005	22.588	1.00	0.00	H
ATOM	3426	CA	THR	157	36.187	2.926	21.170	1.00	11.20	H
ATOM	3427	CB	THR	157	36.856	3.336	19.810	1.00	18.17	H
ATOM	3428	OG1	THR	157	37.647	2.252	19.342	1.00	18.17	H
ATOM	3429	HG1	THR	157	37.099	1.453	19.319	1.00	0.00	H
ATOM	3430	CG2	THR	157	37.624	4.617	19.899	1.00	18.17	H
ATOM	3431	C	THR	157	36.588	1.569	21.691	1.00	11.20	H
ATOM	3432	O	THR	157	37.650	1.343	22.210	1.00	18.17	H
ATOM	3433	N	PHE	158	35.627	0.696	21.619	1.00	2.00	H
ATOM	3434	H	PHE	158	34.780	0.978	21.204	1.00	0.00	H
ATOM	3435	CA	PHE	158	35.720	-0.652	22.098	1.00	2.00	H
ATOM	3436	CB	PHE	158	34.300	-1.223	22.221	1.00	16.07	H
ATOM	3437	CG	PHE	158	33.456	-0.496	23.213	1.00	16.07	H
ATOM	3438	CD1	PHE	158	32.575	0.486	22.791	1.00	16.07	H
ATOM	3439	CD2	PHE	158	33.647	-0.709	24.588	1.00	16.07	H
ATOM	3440	CE1	PHE	158	31.901	1.269	23.703	1.00	16.07	H
ATOM	3441	CE2	PHE	158	32.988	0.057	25.525	1.00	16.07	H
ATOM	3442	CZ	PHE	158	32.107	1.064	25.084	1.00	16.07	H
ATOM	3443	C	PHE	158	36.542	-1.674	21.399	1.00	2.00	H
ATOM	3444	O	PHE	158	36.801	-1.623	20.223	1.00	16.07	H
ATOM	3445	N	PRO	159	37.075	-2.571	22.180	1.00	2.37	H
ATOM	3446	CD	PRO	159	37.187	-2.543	23.651	1.00	4.22	H
ATOM	3447	CA	PRO	159	37.858	-3.639	21.593	1.00	2.37	H
ATOM	3448	CB	PRO	159	38.287	-4.444	22.826	1.00	4.22	H
ATOM	3449	CG	PRO	159	38.403	-3.366	23.873	1.00	4.22	H
ATOM	3450	C	PRO	159	36.832	-4.333	20.695	1.00	2.37	H
ATOM	3451	O	PRO	159	35.653	-4.359	20.993	1.00	4.22	H
ATOM	3452	N	ALA	160	37.258	-4.881	19.577	1.00	2.00	H
ATOM	3453	H	ALA	160	38.213	-4.881	19.348	1.00	0.00	H
ATOM	3454	CA	ALA	160	36.309	-5.505	18.674	1.00	2.00	H
ATOM	3455	CB	ALA	160	36.913	-5.682	17.298	1.00	13.12	H
ATOM	3456	C	ALA	160	35.867	-6.807	19.195	1.00	2.00	H
ATOM	3457	O	ALA	160	36.532	-7.448	19.976	1.00	13.12	H
ATOM	3458	N	VAL	161	34.745	-7.223	18.691	1.00	2.00	H
ATOM	3459	H	VAL	161	34.288	-6.685	18.003	1.00	0.00	H
ATOM	3460	CA	VAL	161	34.163	-8.468	19.095	1.00	2.00	H
ATOM	3461	CB	VAL	161	32.808	-8.153	19.810	1.00	14.39	H
ATOM	3462	CG1	VAL	161	31.727	-9.075	19.395	1.00	14.39	H
ATOM	3463	CG2	VAL	161	33.028	-8.158	21.308	1.00	14.39	H
ATOM	3464	C	VAL	161	34.021	-9.298	17.831	1.00	2.00	H
ATOM	3465	O	VAL	161	33.651	-8.814	16.779	1.00	14.39	H
ATOM	3466	N	LEU	162	34.344	-10.559	17.948	1.00	2.12	H
ATOM	3467	H	LEU	162	34.607	-10.890	18.833	1.00	0.00	H
ATOM	3468	CA	LEU	162	34.326	-11.470	16.828	1.00	2.12	H
ATOM	3469	CB	LEU	162	35.513	-12.402	16.983	1.00	18.88	H

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ATOM	3470	CG	LEU	162	35.608	-13.648	16.136	1.00	18.88	H
ATOM	3471	CD1	LEU	162	36.216	-13.237	14.811	1.00	18.88	H
ATOM	3472	CD2	LEU	162	36.485	-14.701	16.868	1.00	18.88	H
ATOM	3473	C	LEU	162	33.034	-12.267	16.681	1.00	2.12	H
ATOM	3474	O	LEU	162	32.676	-13.111	17.502	1.00	18.88	H
ATOM	3475	N	GLN	163	32.323	-11.968	15.612	1.00	25.59	H
ATOM	3476	H	GLN	163	32.651	-11.283	15.002	1.00	0.00	H
ATOM	3477	CA	GLN	163	31.068	-12.631	15.330	1.00	25.59	H
ATOM	3478	CB	GLN	163	30.289	-11.788	14.355	1.00	16.30	H
ATOM	3479	CG	GLN	163	30.236	-10.394	14.808	1.00	16.30	H
ATOM	3480	CD	GLN	163	29.641	-9.506	13.764	1.00	16.30	H
ATOM	3481	OE1	GLN	163	28.429	-9.185	13.817	1.00	16.30	H
ATOM	3482	NE2	GLN	163	30.479	-9.089	12.786	1.00	16.30	H
ATOM	3483	HE21	GLN	163	30.712	-8.147	12.765	1.00	0.00	H
ATOM	3484	HE22	GLN	163	30.804	-9.761	12.153	1.00	0.00	H
ATOM	3485	C	GLN	163	31.224	-14.047	14.786	1.00	25.59	H
ATOM	3486	O	GLN	163	32.198	-14.397	14.109	1.00	16.30	H
ATOM	3487	N	SER	164	30.233	-14.855	15.093	1.00	2.44	H
ATOM	3488	H	SER	164	29.486	-14.511	15.625	1.00	0.00	H
ATOM	3489	CA	SER	164	30.222	-16.216	14.665	1.00	2.44	H
ATOM	3490	CB	SER	164	28.850	-16.772	14.892	1.00	31.47	H
ATOM	3491	OG	SER	164	27.967	-16.005	14.115	1.00	31.47	H
ATOM	3492	HG	SER	164	27.078	-16.060	14.476	1.00	0.00	H
ATOM	3493	C	SER	164	30.532	-16.221	13.186	1.00	2.44	H
ATOM	3494	O	SER	164	31.243	-17.088	12.701	1.00	31.47	H
ATOM	3495	N	SER	165	29.982	-15.254	12.466	1.00	8.75	H
ATOM	3496	H	SER	165	29.417	-14.589	12.920	1.00	0.00	H
ATOM	3497	CA	SER	165	30.168	-15.149	11.058	1.00	8.75	H
ATOM	3498	CB	SER	165	29.572	-13.875	10.609	1.00	2.00	H
ATOM	3499	OG	SER	165	30.545	-12.853	10.739	1.00	2.00	H
ATOM	3500	HG	SER	165	30.390	-12.167	10.089	1.00	0.00	H
ATOM	3501	C	SER	165	31.649	-15.110	10.715	1.00	8.75	H
ATOM	3502	O	SER	165	32.043	-15.230	9.525	1.00	2.00	H
ATOM	3503	N	GLY	166	32.477	-14.887	11.740	1.00	12.45	H
ATOM	3504	H	GLY	166	32.077	-14.794	12.597	1.00	0.00	H
ATOM	3505	CA	GLY	166	33.901	-14.803	11.523	1.00	12.45	H
ATOM	3506	C	GLY	166	34.241	-13.351	11.267	1.00	12.45	H
ATOM	3507	O	GLY	166	35.399	-12.960	11.171	1.00	25.13	H
ATOM	3508	N	LEU	167	33.220	-12.526	11.159	1.00	22.17	H
ATOM	3509	H	LEU	167	32.309	-12.875	11.243	1.00	0.00	H
ATOM	3510	CA	LEU	167	33.465	-11.129	10.921	1.00	22.17	H
ATOM	3511	CB	LEU	167	32.335	-10.540	10.097	1.00	3.26	H
ATOM	3512	CG	LEU	167	32.309	-10.918	8.618	1.00	3.26	H
ATOM	3513	CD1	LEU	167	31.235	-10.092	7.943	1.00	3.26	H
ATOM	3514	CD2	LEU	167	33.650	-10.710	7.913	1.00	3.26	H
ATOM	3515	C	LEU	167	33.634	-10.398	12.246	1.00	22.17	H
ATOM	3516	O	LEU	167	33.304	-10.923	13.314	1.00	3.26	H
ATOM	3517	N	TYR	168	34.144	-9.176	12.171	1.00	5.57	H
ATOM	3518	H	TYR	168	34.318	-8.807	11.282	1.00	0.00	H
ATOM	3519	CA	TYR	168	34.427	-8.384	13.361	1.00	5.57	H
ATOM	3520	CB	TYR	168	35.827	-7.812	13.271	1.00	21.09	H
ATOM	3521	CG	TYR	168	36.893	-8.740	13.729	1.00	21.09	H
ATOM	3522	CD1	TYR	168	37.007	-9.077	15.073	1.00	21.09	H
ATOM	3523	CE1	TYR	168	37.976	-9.952	15.479	1.00	21.09	H
ATOM	3524	CD2	TYR	168	37.787	-9.302	12.820	1.00	21.09	H
ATOM	3525	CE2	TYR	168	38.743	-10.165	13.230	1.00	21.09	H

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ATOM	3526	CZ	TYR	168	38.831	-10.485	14.540	1.00	21.09	H
ATOM	3527	OH	TYR	168	39.774	-11.359	14.908	1.00	21.09	H
ATOM	3528	HH	TYR	168	39.460	-12.249	14.803	1.00	0.00	H
ATOM	3529	C	TYR	168	33.467	-7.230	13.502	1.00	5.57	H
ATOM	3530	O	TYR	168	32.837	-6.797	12.525	1.00	21.09	H
ATOM	3531	N	SER	169	33.379	-6.700	14.714	1.00	15.29	H
ATOM	3532	H	SER	169	33.931	-7.064	15.433	1.00	0.00	H
ATOM	3533	CA	SER	169	32.480	-5.597	14.978	1.00	15.29	H
ATOM	3534	CB	SER	169	31.118	-6.141	15.344	1.00	7.44	H
ATOM	3535	OG	SER	169	30.156	-5.715	14.420	1.00	7.44	H
ATOM	3536	HG	SER	169	29.304	-5.823	14.846	1.00	0.00	H
ATOM	3537	C	SER	169	32.952	-4.775	16.137	1.00	15.29	H
ATOM	3538	O	SER	169	33.452	-5.297	17.123	1.00	7.44	H
ATOM	3539	N	LEU	170	32.834	-3.472	16.017	1.00	12.90	H
ATOM	3540	H	LEU	170	32.529	-3.055	15.174	1.00	0.00	H
ATOM	3541	CA	LEU	170	33.177	-2.664	17.152	1.00	12.90	H
ATOM	3542	CB	LEU	170	34.633	-2.239	17.099	1.00	5.71	H
ATOM	3543	CG	LEU	170	35.189	-1.080	16.294	1.00	5.71	H
ATOM	3544	CD1	LEU	170	34.475	0.233	16.485	1.00	5.71	H
ATOM	3545	CD2	LEU	170	36.642	-0.954	16.774	1.00	5.71	H
ATOM	3546	C	LEU	170	32.249	-1.477	17.372	1.00	12.90	H
ATOM	3547	O	LEU	170	31.380	-1.151	16.537	1.00	5.71	H
ATOM	3548	N	SER	171	32.399	-0.870	18.538	1.00	2.00	H
ATOM	3549	H	SER	171	33.052	-1.203	19.187	1.00	0.00	H
ATOM	3550	CA	SER	171	31.611	0.286	18.852	1.00	2.00	H
ATOM	3551	CB	SER	171	30.778	0.026	20.079	1.00	2.00	H
ATOM	3552	OG	SER	171	29.422	0.014	19.747	1.00	2.00	H
ATOM	3553	HG	SER	171	28.980	-0.701	20.199	1.00	0.00	H
ATOM	3554	C	SER	171	32.490	1.464	19.124	1.00	2.00	H
ATOM	3555	O	SER	171	33.634	1.311	19.495	1.00	2.00	H
ATOM	3556	N	SER	172	31.988	2.654	18.878	1.00	30.09	H
ATOM	3557	H	SER	172	31.119	2.752	18.424	1.00	0.00	H
ATOM	3558	CA	SER	172	32.762	3.807	19.286	1.00	30.09	H
ATOM	3559	CB	SER	172	33.506	4.527	18.175	1.00	5.65	H
ATOM	3560	OG	SER	172	34.258	5.560	18.796	1.00	5.65	H
ATOM	3561	HG	SER	172	34.610	5.225	19.623	1.00	0.00	H
ATOM	3562	C	SER	172	31.719	4.707	19.880	1.00	30.09	H
ATOM	3563	O	SER	172	30.680	4.973	19.271	1.00	5.65	H
ATOM	3564	N	VAL	173	32.002	5.174	21.085	1.00	9.72	H
ATOM	3565	H	VAL	173	32.863	4.972	21.496	1.00	0.00	H
ATOM	3566	CA	VAL	173	31.050	5.995	21.809	1.00	9.72	H
ATOM	3567	CB	VAL	173	30.496	5.114	22.929	1.00	13.58	H
ATOM	3568	CG1	VAL	173	30.494	5.880	24.210	1.00	13.58	H
ATOM	3569	CG2	VAL	173	29.097	4.544	22.534	1.00	13.58	H
ATOM	3570	C	VAL	173	31.663	7.250	22.389	1.00	9.72	H
ATOM	3571	O	VAL	173	32.864	7.310	22.616	1.00	13.58	H
ATOM	3572	N	VAL	174	30.848	8.264	22.630	1.00	14.53	H
ATOM	3573	H	VAL	174	29.903	8.212	22.422	1.00	0.00	H
ATOM	3574	CA	VAL	174	31.380	9.488	23.249	1.00	14.53	H
ATOM	3575	CB	VAL	174	31.959	10.493	22.216	1.00	7.83	H
ATOM	3576	CG1	VAL	174	30.804	11.147	21.451	1.00	7.83	H
ATOM	3577	CG2	VAL	174	32.822	11.532	22.903	1.00	7.83	H
ATOM	3578	C	VAL	174	30.280	10.175	24.011	1.00	14.53	H
ATOM	3579	O	VAL	174	29.116	9.986	23.697	1.00	7.83	H
ATOM	3580	N	THR	175	30.663	10.954	25.019	1.00	7.10	H
ATOM	3581	H	THR	175	31.625	11.041	25.210	1.00	0.00	H

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ATOM	3582	CA	THR	175	29.717	11.687	25.836	1.00	7.10	H
ATOM	3583	CB	THR	175	29.880	11.397	27.367	1.00	24.95	H
ATOM	3584	OG1	THR	175	31.195	10.908	27.664	1.00	24.95	H
ATOM	3585	HG1	THR	175	31.618	11.475	28.325	1.00	0.00	H
ATOM	3586	CG2	THR	175	28.856	10.382	27.818	1.00	24.95	H
ATOM	3587	C	THR	175	30.001	13.160	25.586	1.00	7.10	H
ATOM	3588	O	THR	175	31.162	13.546	25.431	1.00	24.95	H
ATOM	3589	N	VAL	176	28.942	13.965	25.571	1.00	26.28	H
ATOM	3590	H	VAL	176	28.069	13.564	25.730	1.00	0.00	H
ATOM	3591	CA	VAL	176	28.997	15.403	25.329	1.00	26.28	H
ATOM	3592	CB	VAL	176	28.802	15.698	23.799	1.00	7.07	H
ATOM	3593	CG1	VAL	176	29.540	14.703	22.967	1.00	7.07	H
ATOM	3594	CG2	VAL	176	27.366	15.572	23.426	1.00	7.07	H
ATOM	3595	C	VAL	176	27.814	16.072	26.093	1.00	26.28	H
ATOM	3596	O	VAL	176	26.926	15.391	26.632	1.00	7.07	H
ATOM	3597	N	PRO	177	27.810	17.415	26.173	1.00	13.42	H
ATOM	3598	CD	PRO	177	28.873	18.303	25.687	1.00	7.68	H
ATOM	3599	CA	PRO	177	26.746	18.158	26.843	1.00	13.42	H
ATOM	3600	CB	PRO	177	27.262	19.578	26.899	1.00	7.68	H
ATOM	3601	CG	PRO	177	28.658	19.513	26.496	1.00	7.68	H
ATOM	3602	C	PRO	177	25.491	18.129	25.997	1.00	13.42	H
ATOM	3603	O	PRO	177	25.537	18.353	24.793	1.00	7.68	H
ATOM	3604	N	SER	178	24.350	17.902	26.607	1.00	2.13	H
ATOM	3605	H	SER	178	24.346	17.722	27.567	1.00	0.00	H
ATOM	3606	CA	SER	178	23.179	17.908	25.794	1.00	2.13	H
ATOM	3607	CB	SER	178	22.092	17.281	26.575	1.00	2.36	H
ATOM	3608	OG	SER	178	22.565	17.349	27.864	1.00	2.36	H
ATOM	3609	HG	SER	178	22.858	18.239	28.053	1.00	0.00	H
ATOM	3610	C	SER	178	22.814	19.343	25.412	1.00	2.13	H
ATOM	3611	O	SER	178	22.125	19.563	24.442	1.00	2.36	H
ATOM	3612	N	SER	179	23.278	20.316	26.166	1.00	3.15	H
ATOM	3613	H	SER	179	23.847	20.111	26.931	1.00	0.00	H
ATOM	3614	CA	SER	179	22.943	21.695	25.861	1.00	3.15	H
ATOM	3615	CB	SER	179	23.707	22.683	26.747	1.00	10.96	H
ATOM	3616	OG	SER	179	24.895	22.161	27.296	1.00	10.96	H
ATOM	3617	HG	SER	179	24.991	21.236	27.034	1.00	0.00	H
ATOM	3618	C	SER	179	23.237	22.013	24.426	1.00	3.15	H
ATOM	3619	O	SER	179	22.474	22.713	23.791	1.00	10.96	H
ATOM	3620	N	SER	180	24.334	21.475	23.892	1.00	12.05	H
ATOM	3621	H	SER	180	24.920	20.887	24.428	1.00	0.00	H
ATOM	3622	CA	SER	180	24.670	21.746	22.511	1.00	12.05	H
ATOM	3623	CB	SER	180	26.155	22.102	22.386	1.00	32.80	H
ATOM	3624	OG	SER	180	26.928	21.533	23.420	1.00	32.80	H
ATOM	3625	HG	SER	180	27.573	22.166	23.739	1.00	0.00	H
ATOM	3626	C	SER	180	24.320	20.647	21.518	1.00	12.05	H
ATOM	3627	O	SER	180	24.777	20.668	20.392	1.00	32.80	H
ATOM	3628	N	LEU	181	23.537	19.667	21.908	1.00	11.48	H
ATOM	3629	H	LEU	181	23.210	19.615	22.833	1.00	0.00	H
ATOM	3630	CA	LEU	181	23.185	18.653	20.924	1.00	11.48	H
ATOM	3631	CB	LEU	181	22.128	17.719	21.460	1.00	24.85	H
ATOM	3632	CG	LEU	181	22.790	16.657	22.301	1.00	24.85	H
ATOM	3633	CD1	LEU	181	21.768	16.003	23.157	1.00	24.85	H
ATOM	3634	CD2	LEU	181	23.455	15.694	21.397	1.00	24.85	H
ATOM	3635	C	LEU	181	22.608	19.511	19.852	1.00	11.48	H
ATOM	3636	O	LEU	181	22.077	20.583	20.169	1.00	24.85	H
ATOM	3637	N	GLY	182	22.710	19.092	18.592	1.00	37.12	H

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ATOM	3638	H	GLY	182	23.106	18.217	18.403	1.00	0.00	H
ATOM	3639	CA	GLY	182	22.211	19.959	17.528	1.00	37.12	H
ATOM	3640	C	GLY	182	22.778	21.388	17.689	1.00	37.12	H
ATOM	3641	O	GLY	182	22.117	22.293	18.160	1.00	7.85	H
ATOM	3642	N	THR	183	24.042	21.568	17.314	1.00	27.40	H
ATOM	3643	H	THR	183	24.526	20.798	16.969	1.00	0.00	H
ATOM	3644	CA	THR	183	24.749	22.844	17.376	1.00	27.40	H
ATOM	3645	CB	THR	183	24.452	23.547	18.696	1.00	14.59	H
ATOM	3646	OG1	THR	183	23.924	24.833	18.395	1.00	14.59	H
ATOM	3647	HG1	THR	183	22.987	24.813	18.188	1.00	0.00	H
ATOM	3648	CG2	THR	183	25.693	23.710	19.560	1.00	14.59	H
ATOM	3649	C	THR	183	26.217	22.486	17.231	1.00	27.40	H
ATOM	3650	O	THR	183	26.991	23.111	16.547	1.00	14.59	H
ATOM	3651	N	GLN	184	26.593	21.422	17.884	1.00	16.35	H
ATOM	3652	H	GLN	184	25.960	20.931	18.446	1.00	0.00	H
ATOM	3653	CA	GLN	184	27.941	20.971	17.773	1.00	16.35	H
ATOM	3654	CB	GLN	184	28.424	20.524	19.127	1.00	17.09	H
ATOM	3655	CG	GLN	184	28.677	21.708	20.021	1.00	17.09	H
ATOM	3656	CD	GLN	184	29.303	22.860	19.248	1.00	17.09	H
ATOM	3657	OE1	GLN	184	30.536	22.990	19.165	1.00	17.09	H
ATOM	3658	NE2	GLN	184	28.467	23.697	18.670	1.00	17.09	H
ATOM	3659	HE21	GLN	184	27.927	24.270	19.254	1.00	0.00	H
ATOM	3660	HE22	GLN	184	28.428	23.715	17.692	1.00	0.00	H
ATOM	3661	C	GLN	184	27.729	19.828	16.839	1.00	16.35	H
ATOM	3662	O	GLN	184	26.630	19.324	16.750	1.00	17.09	H
ATOM	3663	N	THR	185	28.738	19.443	16.084	1.00	24.08	H
ATOM	3664	H	THR	185	29.617	19.894	16.117	1.00	0.00	H
ATOM	3665	CA	THR	185	28.517	18.330	15.193	1.00	24.08	H
ATOM	3666	CB	THR	185	28.299	18.796	13.702	1.00	33.38	H
ATOM	3667	OG1	THR	185	29.410	19.554	13.240	1.00	33.38	H
ATOM	3668	HG1	THR	185	29.077	20.307	12.741	1.00	0.00	H
ATOM	3669	CG2	THR	185	27.017	19.653	13.585	1.00	33.38	H
ATOM	3670	C	THR	185	29.561	17.238	15.332	1.00	24.08	H
ATOM	3671	O	THR	185	30.757	17.449	15.396	1.00	33.38	H
ATOM	3672	N	TYR	186	29.056	16.033	15.434	1.00	21.00	H
ATOM	3673	H	TYR	186	28.089	15.911	15.374	1.00	0.00	H
ATOM	3674	CA	TYR	186	29.906	14.896	15.632	1.00	21.00	H
ATOM	3675	CB	TYR	186	29.474	14.251	16.928	1.00	8.09	H
ATOM	3676	CG	TYR	186	29.387	15.238	18.081	1.00	8.09	H
ATOM	3677	CD1	TYR	186	30.505	15.513	18.856	1.00	8.09	H
ATOM	3678	CE1	TYR	186	30.431	16.340	19.925	1.00	8.09	H
ATOM	3679	CD2	TYR	186	28.188	15.846	18.415	1.00	8.09	H
ATOM	3680	CE2	TYR	186	28.102	16.700	19.516	1.00	8.09	H
ATOM	3681	CZ	TYR	186	29.232	16.935	20.284	1.00	8.09	H
ATOM	3682	OH	TYR	186	29.162	17.626	21.484	1.00	8.09	H
ATOM	3683	HH	TYR	186	28.244	17.727	21.752	1.00	0.00	H
ATOM	3684	C	TYR	186	29.869	13.923	14.466	1.00	21.00	H
ATOM	3685	O	TYR	186	28.835	13.421	14.034	1.00	8.09	H
ATOM	3686	N	ILE	187	31.049	13.696	13.949	1.00	18.79	H
ATOM	3687	H	ILE	187	31.828	14.146	14.335	1.00	0.00	H
ATOM	3688	CA	ILE	187	31.272	12.820	12.834	1.00	18.79	H
ATOM	3689	CB	ILE	187	31.962	13.593	11.664	1.00	11.04	H
ATOM	3690	CG2	ILE	187	32.271	12.622	10.489	1.00	11.04	H
ATOM	3691	CG1	ILE	187	31.147	14.869	11.330	1.00	11.04	H
ATOM	3692	CD1	ILE	187	30.815	15.082	9.837	1.00	11.04	H
ATOM	3693	C	ILE	187	32.287	11.815	13.318	1.00	18.79	H

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ATOM	3694	O	ILE	187	33.293	12.212	13.868	1.00	11.04	H
ATOM	3695	N	CYS	188	32.031	10.532	13.125	1.00	13.71	H
ATOM	3696	H	CYS	188	31.181	10.249	12.734	1.00	0.00	H
ATOM	3697	CA	CYS	188	33.027	9.534	13.485	1.00	13.71	H
ATOM	3698	C	CYS	188	33.797	9.201	12.195	1.00	13.71	H
ATOM	3699	O	CYS	188	33.218	9.147	11.083	1.00	3.53	H
ATOM	3700	CB	CYS	188	32.385	8.279	14.032	1.00	3.53	H
ATOM	3701	SG	CYS	188	31.260	7.477	12.858	1.00	3.53	H
ATOM	3702	N	ASN	189	35.099	8.990	12.353	1.00	22.24	H
ATOM	3703	H	ASN	189	35.467	9.041	13.219	1.00	0.00	H
ATOM	3704	CA	ASN	189	36.011	8.674	11.254	1.00	22.24	H
ATOM	3705	CB	ASN	189	37.162	9.631	11.327	1.00	10.05	H
ATOM	3706	CG	ASN	189	36.685	11.031	11.285	1.00	10.05	H
ATOM	3707	OD1	ASN	189	37.041	11.869	12.116	1.00	10.05	H
ATOM	3708	ND2	ASN	189	35.829	11.304	10.315	1.00	10.05	H
ATOM	3709	HD21	ASN	189	34.871	11.134	10.467	1.00	0.00	H
ATOM	3710	HD22	ASN	189	36.171	11.672	9.483	1.00	0.00	H
ATOM	3711	C	ASN	189	36.474	7.237	11.366	1.00	22.24	H
ATOM	3712	O	ASN	189	37.497	6.893	12.018	1.00	10.05	H
ATOM	3713	N	VAL	190	35.672	6.402	10.723	1.00	16.57	H
ATOM	3714	H	VAL	190	34.915	6.778	10.239	1.00	0.00	H
ATOM	3715	CA	VAL	190	35.873	4.980	10.697	1.00	16.57	H
ATOM	3716	CB	VAL	190	34.582	4.320	10.274	1.00	18.37	H
ATOM	3717	CG1	VAL	190	34.731	2.823	10.247	1.00	18.37	H
ATOM	3718	CG2	VAL	190	33.498	4.765	11.192	1.00	18.37	H
ATOM	3719	C	VAL	190	36.922	4.706	9.672	1.00	16.57	H
ATOM	3720	O	VAL	190	36.787	5.122	8.528	1.00	18.37	H
ATOM	3721	N	ASN	191	37.980	4.017	10.038	1.00	20.29	H
ATOM	3722	H	ASN	191	38.103	3.706	10.938	1.00	0.00	H
ATOM	3723	CA	ASN	191	38.978	3.727	9.021	1.00	20.29	H
ATOM	3724	CB	ASN	191	40.213	4.563	9.252	1.00	18.96	H
ATOM	3725	CG	ASN	191	41.202	4.465	8.119	1.00	18.96	H
ATOM	3726	OD1	ASN	191	41.912	5.426	7.820	1.00	18.96	H
ATOM	3727	ND2	ASN	191	41.262	3.313	7.477	1.00	18.96	H
ATOM	3728	HD21	ASN	191	40.747	3.237	6.632	1.00	0.00	H
ATOM	3729	HD22	ASN	191	41.799	2.594	7.843	1.00	0.00	H
ATOM	3730	C	ASN	191	39.324	2.233	9.040	1.00	20.29	H
ATOM	3731	O	ASN	191	39.557	1.642	10.105	1.00	18.96	H
ATOM	3732	N	HIS	192	39.313	1.603	7.866	1.00	8.03	H
ATOM	3733	H	HIS	192	39.072	2.094	7.069	1.00	0.00	H
ATOM	3734	CA	HIS	192	39.642	0.184	7.754	1.00	8.03	H
ATOM	3735	CB	HIS	192	38.380	-0.627	7.501	1.00	16.14	H
ATOM	3736	CG	HIS	192	38.633	-2.099	7.453	1.00	16.14	H
ATOM	3737	CD2	HIS	192	38.241	-3.036	6.559	1.00	16.14	H
ATOM	3738	ND1	HIS	192	39.477	-2.739	8.341	1.00	16.14	H
ATOM	3739	HD1	HIS	192	39.916	-2.336	9.120	1.00	0.00	H
ATOM	3740	CE1	HIS	192	39.595	-4.003	7.990	1.00	16.14	H
ATOM	3741	NE2	HIS	192	38.857	-4.208	6.914	1.00	16.14	H
ATOM	3742	HE2	HIS	192	38.752	-5.052	6.425	1.00	0.00	H
ATOM	3743	C	HIS	192	40.611	-0.010	6.595	1.00	8.03	H
ATOM	3744	O	HIS	192	40.178	-0.337	5.507	1.00	16.14	H
ATOM	3745	N	LYS	193	41.906	0.178	6.817	1.00	15.46	H
ATOM	3746	H	LYS	193	42.205	0.408	7.728	1.00	0.00	H
ATOM	3747	CA	LYS	193	42.901	0.071	5.735	1.00	15.46	H
ATOM	3748	CB	LYS	193	44.329	0.173	6.297	1.00	33.97	H
ATOM	3749	CG	LYS	193	45.049	1.523	6.076	1.00	33.97	H



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ATOM	3750	CD	LYS	193	44.201	2.746	6.543	1.00	33.97	H
ATOM	3751	CE	LYS	193	45.031	3.886	7.143	1.00	33.97	H
ATOM	3752	NZ	LYS	193	46.418	3.490	7.576	1.00	33.97	H
ATOM	3753	HZ1	LYS	193	47.022	3.276	6.748	1.00	0.00	H
ATOM	3754	HZ2	LYS	193	46.364	2.648	8.175	1.00	0.00	H
ATOM	3755	HZ3	LYS	193	46.861	4.269	8.111	1.00	0.00	H
ATOM	3756	C	LYS	193	42.838	-1.146	4.805	1.00	15.46	H
ATOM	3757	O	LYS	193	42.870	-0.999	3.584	1.00	33.97	H
ATOM	3758	N	PRO	194	42.704	-2.362	5.373	1.00	23.26	H
ATOM	3759	CD	PRO	194	42.588	-2.647	6.815	1.00	23.29	H
ATOM	3760	CA	PRO	194	42.647	-3.591	4.579	1.00	23.26	H
ATOM	3761	CB	PRO	194	42.471	-4.687	5.631	1.00	23.29	H
ATOM	3762	CG	PRO	194	43.036	-4.068	6.891	1.00	23.29	H
ATOM	3763	C	PRO	194	41.610	-3.691	3.475	1.00	23.26	H
ATOM	3764	O	PRO	194	41.696	-4.598	2.630	1.00	23.29	H
ATOM	3765	N	SER	195	40.623	-2.799	3.477	1.00	21.27	H
ATOM	3766	H	SER	195	40.585	-2.105	4.162	1.00	0.00	H
ATOM	3767	CA	SER	195	39.587	-2.837	2.458	1.00	21.27	H
ATOM	3768	CB	SER	195	38.249	-3.355	3.054	1.00	49.13	H
ATOM	3769	OG	SER	195	37.626	-2.470	3.988	1.00	49.13	H
ATOM	3770	HG	SER	195	37.592	-1.581	3.620	1.00	0.00	H
ATOM	3771	C	SER	195	39.463	-1.407	1.979	1.00	21.27	H
ATOM	3772	O	SER	195	38.444	-1.008	1.390	1.00	49.13	H
ATOM	3773	N	ASN	196	40.528	-0.643	2.237	1.00	15.71	H
ATOM	3774	H	ASN	196	41.284	-1.061	2.676	1.00	0.00	H
ATOM	3775	CA	ASN	196	40.586	0.771	1.894	1.00	15.71	H
ATOM	3776	CB	ASN	196	40.779	1.017	0.381	1.00	46.35	H
ATOM	3777	CG	ASN	196	41.639	-0.037	-0.309	1.00	46.35	H
ATOM	3778	OD1	ASN	196	42.848	-0.159	-0.042	1.00	46.35	H
ATOM	3779	ND2	ASN	196	41.020	-0.790	-1.234	1.00	46.35	H
ATOM	3780	HD21	ASN	196	41.364	-0.762	-2.146	1.00	0.00	H
ATOM	3781	HD22	ASN	196	40.251	-1.335	-0.948	1.00	0.00	H
ATOM	3782	C	ASN	196	39.263	1.426	2.343	1.00	15.71	H
ATOM	3783	O	ASN	196	38.680	2.231	1.622	1.00	46.35	H
ATOM	3784	N	THR	197	38.773	1.081	3.526	1.00	18.46	H
ATOM	3785	H	THR	197	39.237	0.419	4.085	1.00	0.00	H
ATOM	3786	CA	THR	197	37.546	1.694	3.970	1.00	18.46	H
ATOM	3787	CB	THR	197	36.655	0.700	4.780	1.00	34.72	H
ATOM	3788	OG1	THR	197	35.786	0.002	3.869	1.00	34.72	H
ATOM	3789	HG1	THR	197	35.756	-0.932	4.096	1.00	0.00	H
ATOM	3790	CG2	THR	197	35.772	1.466	5.837	1.00	34.72	H
ATOM	3791	C	THR	197	37.760	2.978	4.769	1.00	18.46	H
ATOM	3792	O	THR	197	38.433	3.015	5.792	1.00	34.72	H
ATOM	3793	N	LYS	198	37.167	4.035	4.239	1.00	11.62	H
ATOM	3794	H	LYS	198	36.683	3.935	3.390	1.00	0.00	H
ATOM	3795	CA	LYS	198	37.177	5.345	4.845	1.00	11.62	H
ATOM	3796	CB	LYS	198	37.996	6.326	4.030	1.00	23.98	H
ATOM	3797	CG	LYS	198	39.341	6.631	4.644	1.00	23.98	H
ATOM	3798	CD	LYS	198	39.611	8.124	4.557	1.00	23.98	H
ATOM	3799	CE	LYS	198	39.059	8.710	3.231	1.00	23.98	H
ATOM	3800	NZ	LYS	198	39.726	8.166	1.947	1.00	23.98	H
ATOM	3801	HZ1	LYS	198	38.972	7.869	1.304	1.00	0.00	H
ATOM	3802	HZ2	LYS	198	40.338	7.361	2.185	1.00	0.00	H
ATOM	3803	HZ3	LYS	198	40.288	8.924	1.508	1.00	0.00	H
ATOM	3804	C	LYS	198	35.722	5.742	4.818	1.00	11.62	H
ATOM	3805	O	LYS	198	35.053	5.657	3.802	1.00	23.98	H

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ATOM	3806	N	VAL	199	35.199	6.132	5.955	1.00	16.76	H
ATOM	3807	H	VAL	199	35.715	6.151	6.784	1.00	0.00	H
ATOM	3808	CA	VAL	199	33.836	6.545	5.952	1.00	16.76	H
ATOM	3809	CB	VAL	199	32.931	5.316	6.100	1.00	12.78	H
ATOM	3810	CG1	VAL	199	31.665	5.621	6.881	1.00	12.78	H
ATOM	3811	CG2	VAL	199	32.563	4.838	4.714	1.00	12.78	H
ATOM	3812	C	VAL	199	33.615	7.578	7.024	1.00	16.76	H
ATOM	3813	O	VAL	199	34.332	7.627	8.026	1.00	12.78	H
ATOM	3814	N	ASP	200	32.668	8.467	6.757	1.00	26.14	H
ATOM	3815	H	ASP	200	32.212	8.451	5.886	1.00	0.00	H
ATOM	3816	CA	ASP	200	32.294	9.465	7.734	1.00	26.14	H
ATOM	3817	CB	ASP	200	32.702	10.837	7.270	1.00	39.01	H
ATOM	3818	CG	ASP	200	34.169	10.955	7.202	1.00	39.01	H
ATOM	3819	OD1	ASP	200	34.816	10.155	7.899	1.00	39.01	H
ATOM	3820	OD2	ASP	200	34.699	11.811	6.467	1.00	39.01	H
ATOM	3821	C	ASP	200	30.795	9.366	7.965	1.00	26.14	H
ATOM	3822	O	ASP	200	29.964	9.297	7.036	1.00	39.01	H
ATOM	3823	N	LYS	201	30.447	9.252	9.225	1.00	7.05	H
ATOM	3824	H	LYS	201	31.133	9.199	9.917	1.00	0.00	H
ATOM	3825	CA	LYS	201	29.051	9.216	9.550	1.00	7.05	H
ATOM	3826	CB	LYS	201	28.669	7.886	10.165	1.00	23.61	H
ATOM	3827	CG	LYS	201	27.176	7.630	10.105	1.00	23.61	H
ATOM	3828	CD	LYS	201	26.648	7.558	8.662	1.00	23.61	H
ATOM	3829	CE	LYS	201	25.750	8.763	8.328	1.00	23.61	H
ATOM	3830	NZ	LYS	201	25.684	9.172	6.870	1.00	23.61	H
ATOM	3831	HZ1	LYS	201	24.762	9.610	6.690	1.00	0.00	H
ATOM	3832	HZ2	LYS	201	25.806	8.338	6.251	1.00	0.00	H
ATOM	3833	HZ3	LYS	201	26.435	9.871	6.661	1.00	0.00	H
ATOM	3834	C	LYS	201	28.872	10.356	10.517	1.00	7.05	H
ATOM	3835	O	LYS	201	29.647	10.549	11.456	1.00	23.61	H
ATOM	3836	N	LYS	202	27.886	11.165	10.200	1.00	13.55	H
ATOM	3837	H	LYS	202	27.370	10.985	9.384	1.00	0.00	H
ATOM	3838	CA	LYS	202	27.549	12.293	11.024	1.00	13.55	H
ATOM	3839	CB	LYS	202	27.120	13.488	10.152	1.00	16.43	H
ATOM	3840	CG	LYS	202	25.773	14.097	10.530	1.00	16.43	H
ATOM	3841	CD	LYS	202	25.895	15.455	11.247	1.00	16.43	H
ATOM	3842	CE	LYS	202	24.856	16.456	10.717	1.00	16.43	H
ATOM	3843	NZ	LYS	202	25.386	17.850	10.407	1.00	16.43	H
ATOM	3844	HZ1	LYS	202	26.403	17.809	10.178	1.00	0.00	H
ATOM	3845	HZ2	LYS	202	25.260	18.412	11.274	1.00	0.00	H
ATOM	3846	HZ3	LYS	202	24.854	18.303	9.641	1.00	0.00	H
ATOM	3847	C	LYS	202	26.397	11.702	11.789	1.00	13.55	H
ATOM	3848	O	LYS	202	25.537	11.084	11.206	1.00	16.43	H
ATOM	3849	N	VAL	203	26.409	11.850	13.103	1.00	4.68	H
ATOM	3850	H	VAL	203	27.153	12.341	13.516	1.00	0.00	H
ATOM	3851	CA	VAL	203	25.348	11.325	13.931	1.00	4.68	H
ATOM	3852	CB	VAL	203	25.952	10.278	14.918	1.00	15.66	H
ATOM	3853	CG1	VAL	203	27.413	10.225	14.753	1.00	15.66	H
ATOM	3854	CG2	VAL	203	25.567	10.530	16.344	1.00	15.66	H
ATOM	3855	C	VAL	203	24.622	12.462	14.632	1.00	4.68	H
ATOM	3856	O	VAL	203	25.264	13.259	15.284	1.00	15.66	H
ATOM	3857	N	GLU	204	23.299	12.589	14.462	1.00	25.05	H
ATOM	3858	H	GLU	204	22.817	11.964	13.878	1.00	0.00	H
ATOM	3859	CA	GLU	204	22.562	13.650	15.170	1.00	25.05	H
ATOM	3860	CB	GLU	204	22.424	14.886	14.293	1.00	33.92	H
ATOM	3861	CG	GLU	204	21.425	14.771	13.155	1.00	33.92	H

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ATOM	3862	CD	GLU	204	22.119	14.391	11.879	1.00	33.92	H
ATOM	3863	OE1	GLU	204	23.250	13.854	11.994	1.00	33.92	H
ATOM	3864	OE2	GLU	204	21.554	14.626	10.790	1.00	33.92	H
ATOM	3865	C	GLU	204	21.181	13.258	15.718	1.00	25.05	H
ATOM	3866	O	GLU	204	20.709	12.202	15.265	1.00	33.92	H
ATOM	3867	OT	GLU	204	20.585	13.996	16.574	1.00	33.92	H
ATOM	3868	CB	ASP	1	60.965	15.915	68.832	1.00	28.46	E
ATOM	3869	CG	ASP	1	61.088	15.437	67.374	1.00	28.46	E
ATOM	3870	OD1	ASP	1	60.727	16.220	66.471	1.00	28.46	E
ATOM	3871	OD2	ASP	1	61.524	14.300	67.116	1.00	28.46	E
ATOM	3872	C	ASP	1	61.821	15.815	71.176	1.00	23.13	E
ATOM	3873	O	ASP	1	62.160	15.229	72.216	1.00	28.46	E
ATOM	3874	HT1	ASP	1	60.384	13.579	69.426	1.00	0.00	E
ATOM	3875	HT2	ASP	1	61.183	13.430	70.927	1.00	0.00	E
ATOM	3876	N	ASP	1	61.293	13.679	69.923	1.00	23.13	E
ATOM	3877	HT3	ASP	1	61.975	13.027	69.488	1.00	0.00	E
ATOM	3878	CA	ASP	1	61.822	15.106	69.806	1.00	23.13	E
ATOM	3879	N	ILE	2	61.471	17.081	71.224	1.00	20.65	E
ATOM	3880	H	ILE	2	61.250	17.605	70.424	1.00	0.00	E
ATOM	3881	CA	ILE	2	61.433	17.672	72.548	1.00	20.65	E
ATOM	3882	CB	ILE	2	61.769	19.148	72.493	1.00	16.48	E
ATOM	3883	CG2	ILE	2	61.613	19.758	73.844	1.00	16.48	E
ATOM	3884	CG1	ILE	2	63.184	19.300	71.973	1.00	16.48	E
ATOM	3885	CD1	ILE	2	64.009	20.326	72.647	1.00	16.48	E
ATOM	3886	C	ILE	2	59.992	17.440	73.028	1.00	20.65	E
ATOM	3887	O	ILE	2	59.040	17.495	72.221	1.00	16.48	E
ATOM	3888	N	VAL	3	59.800	17.073	74.288	1.00	25.33	E
ATOM	3889	H	VAL	3	60.549	16.882	74.892	1.00	0.00	E
ATOM	3890	CA	VAL	3	58.422	16.928	74.717	1.00	25.33	E
ATOM	3891	CB	VAL	3	58.161	15.525	75.311	1.00	3.57	E
ATOM	3892	CG1	VAL	3	57.135	15.590	76.434	1.00	3.57	E
ATOM	3893	CG2	VAL	3	57.694	14.597	74.193	1.00	3.57	E
ATOM	3894	C	VAL	3	58.140	18.010	75.718	1.00	25.33	E
ATOM	3895	O	VAL	3	58.800	18.069	76.734	1.00	3.57	E
ATOM	3896	N	LEU	4	57.191	18.886	75.401	1.00	20.56	E
ATOM	3897	H	LEU	4	56.736	18.800	74.550	1.00	0.00	E
ATOM	3898	CA	LEU	4	56.810	19.982	76.310	1.00	20.56	E
ATOM	3899	CB	LEU	4	56.533	21.286	75.541	1.00	15.68	E
ATOM	3900	CG	LEU	4	57.707	21.798	74.697	1.00	15.68	E
ATOM	3901	CD1	LEU	4	57.579	23.263	74.343	1.00	15.68	E
ATOM	3902	CD2	LEU	4	58.975	21.539	75.470	1.00	15.68	E
ATOM	3903	C	LEU	4	55.568	19.575	77.080	1.00	20.56	E
ATOM	3904	O	LEU	4	54.511	19.337	76.501	1.00	15.68	E
ATOM	3905	N	THR	5	55.700	19.492	78.395	1.00	13.02	E
ATOM	3906	H	THR	5	56.551	19.705	78.790	1.00	0.00	E
ATOM	3907	CA	THR	5	54.568	19.090	79.221	1.00	13.02	E
ATOM	3908	CB	THR	5	54.998	18.016	80.220	1.00	20.72	E
ATOM	3909	OG1	THR	5	55.017	16.744	79.571	1.00	20.72	E
ATOM	3910	HG1	THR	5	54.864	16.065	80.236	1.00	0.00	E
ATOM	3911	CG2	THR	5	54.050	17.994	81.401	1.00	20.72	E
ATOM	3912	C	THR	5	53.980	20.269	79.991	1.00	13.02	E
ATOM	3913	O	THR	5	54.655	20.846	80.810	1.00	20.72	E
ATOM	3914	N	GLN	6	52.733	20.640	79.728	1.00	15.56	E
ATOM	3915	H	GLN	6	52.231	20.162	79.047	1.00	0.00	E
ATOM	3916	CA	GLN	6	52.108	21.752	80.472	1.00	15.56	E
ATOM	3917	CB	GLN	6	51.139	22.564	79.584	1.00	17.17	E

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ATOM	3918	CG	GLN	6	51.818	23.326	78.451	1.00	17.17	E
ATOM	3919	CD	GLN	6	51.077	24.570	77.971	1.00	17.17	E
ATOM	3920	OE1	GLN	6	51.592	25.333	77.147	1.00	17.17	E
ATOM	3921	NE2	GLN	6	49.884	24.788	78.487	1.00	17.17	E
ATOM	3922	HE21	GLN	6	49.564	25.711	78.591	1.00	0.00	E
ATOM	3923	HE22	GLN	6	49.355	24.009	78.755	1.00	0.00	E
ATOM	3924	C	GLN	6	51.343	21.228	81.704	1.00	15.56	E
ATOM	3925	O	GLN	6	51.083	20.017	81.867	1.00	17.17	E
ATOM	3926	N	SER	7	50.993	22.142	82.592	1.00	32.66	E
ATOM	3927	H	SER	7	51.231	23.074	82.437	1.00	0.00	E
ATOM	3928	CA	SER	7	50.272	21.774	83.786	1.00	32.66	E
ATOM	3929	CB	SER	7	51.100	20.826	84.625	1.00	17.92	E
ATOM	3930	OG	SER	7	51.251	21.378	85.911	1.00	17.92	E
ATOM	3931	HG	SER	7	51.437	20.686	86.554	1.00	0.00	E
ATOM	3932	C	SER	7	50.041	23.064	84.539	1.00	32.66	E
ATOM	3933	O	SER	7	50.910	23.939	84.564	1.00	17.92	E
ATOM	3934	N	PRO	8	48.850	23.216	85.146	1.00	34.86	E
ATOM	3935	CD	PRO	8	48.408	24.430	85.865	1.00	12.10	E
ATOM	3936	CA	PRO	8	47.780	22.214	85.118	1.00	34.86	E
ATOM	3937	CB	PRO	8	46.858	22.691	86.231	1.00	12.10	E
ATOM	3938	CG	PRO	8	46.929	24.177	86.091	1.00	12.10	E
ATOM	3939	C	PRO	8	47.108	22.302	83.757	1.00	34.86	E
ATOM	3940	O	PRO	8	47.451	23.184	82.984	1.00	12.10	E
ATOM	3941	N	ALA	9	46.162	21.406	83.479	1.00	11.12	E
ATOM	3942	H	ALA	9	45.952	20.717	84.141	1.00	0.00	E
ATOM	3943	CA	ALA	9	45.403	21.404	82.212	1.00	11.12	E
ATOM	3944	CB	ALA	9	44.705	20.106	82.027	1.00	25.67	E
ATOM	3945	C	ALA	9	44.373	22.551	82.216	1.00	11.12	E
ATOM	3946	O	ALA	9	44.547	23.556	81.520	1.00	25.67	E
ATOM	3947	N	THR	10	43.291	22.418	82.977	1.00	2.27	E
ATOM	3948	H	THR	10	43.131	21.591	83.477	1.00	0.00	E
ATOM	3949	CA	THR	10	42.362	23.526	83.042	1.00	2.27	E
ATOM	3950	CB	THR	10	40.931	23.058	83.100	1.00	32.53	E
ATOM	3951	OG1	THR	10	40.519	22.943	84.479	1.00	32.53	E
ATOM	3952	HG1	THR	10	39.676	23.377	84.621	1.00	0.00	E
ATOM	3953	CG2	THR	10	40.798	21.701	82.401	1.00	32.53	E
ATOM	3954	C	THR	10	42.738	24.081	84.379	1.00	2.27	E
ATOM	3955	O	THR	10	43.168	23.317	85.244	1.00	32.53	E
ATOM	3956	N	LEU	11	42.612	25.407	84.547	1.00	11.42	E
ATOM	3957	H	LEU	11	42.302	25.953	83.802	1.00	0.00	E
ATOM	3958	CA	LEU	11	42.899	26.084	85.814	1.00	11.42	E
ATOM	3959	CB	LEU	11	44.304	26.655	85.808	1.00	11.20	E
ATOM	3960	CG	LEU	11	44.860	27.991	85.303	1.00	11.20	E
ATOM	3961	CD1	LEU	11	43.816	28.890	84.842	1.00	11.20	E
ATOM	3962	CD2	LEU	11	45.668	28.672	86.423	1.00	11.20	E
ATOM	3963	C	LEU	11	41.849	27.158	86.074	1.00	11.42	E
ATOM	3964	O	LEU	11	41.640	28.025	85.244	1.00	11.20	E
ATOM	3965	N	SER	12	41.160	27.101	87.214	1.00	30.12	E
ATOM	3966	H	SER	12	41.355	26.408	87.865	1.00	0.00	E
ATOM	3967	CA	SER	12	40.091	28.082	87.497	1.00	30.12	E
ATOM	3968	CB	SER	12	38.891	27.391	88.153	1.00	26.13	E
ATOM	3969	OG	SER	12	37.700	28.097	87.892	1.00	26.13	E
ATOM	3970	HG	SER	12	37.530	28.133	86.953	1.00	0.00	E
ATOM	3971	C	SER	12	40.495	29.229	88.371	1.00	30.12	E
ATOM	3972	O	SER	12	40.946	29.039	89.466	1.00	26.13	E
ATOM	3973	N	ALA	13	40.259	30.428	87.896	1.00	8.50	E

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ATOM	3974	H	ALA	13	39.816	30.508	87.022	1.00	0.00	E
ATOM	3975	CA	ALA	13	40.614	31.641	88.616	1.00	8.50	E
ATOM	3976	CB	ALA	13	42.048	32.100	88.174	1.00	22.07	E
ATOM	3977	C	ALA	13	39.590	32.769	88.330	1.00	8.50	E
ATOM	3978	O	ALA	13	39.098	32.900	87.219	1.00	22.07	E
ATOM	3979	N	SER	14	39.263	33.590	89.314	1.00	8.10	E
ATOM	3980	H	SER	14	39.637	33.450	90.210	1.00	0.00	E
ATOM	3981	CA	SER	14	38.330	34.670	89.052	1.00	8.10	E
ATOM	3982	CB	SER	14	37.427	34.915	90.256	1.00	17.07	E
ATOM	3983	OG	SER	14	38.204	35.109	91.423	1.00	17.07	E
ATOM	3984	HG	SER	14	37.779	35.786	91.975	1.00	0.00	E
ATOM	3985	C	SER	14	39.214	35.870	88.810	1.00	8.10	E
ATOM	3986	O	SER	14	40.402	35.848	89.136	1.00	17.07	E
ATOM	3987	N	PRO	15	38.650	36.962	88.280	1.00	18.70	E
ATOM	3988	CD	PRO	15	37.265	37.257	87.911	1.00	14.41	E
ATOM	3989	CA	PRO	15	39.514	38.107	88.041	1.00	18.70	E
ATOM	3990	CB	PRO	15	38.561	39.179	87.545	1.00	14.41	E
ATOM	3991	CG	PRO	15	37.429	38.451	87.017	1.00	14.41	E
ATOM	3992	C	PRO	15	40.248	38.536	89.286	1.00	18.70	E
ATOM	3993	O	PRO	15	39.889	38.167	90.424	1.00	14.41	E
ATOM	3994	N	GLY	16	41.287	39.337	89.068	1.00	33.55	E
ATOM	3995	H	GLY	16	41.520	39.568	88.144	1.00	0.00	E
ATOM	3996	CA	GLY	16	42.070	39.859	90.171	1.00	33.55	E
ATOM	3997	C	GLY	16	43.054	38.837	90.665	1.00	33.55	E
ATOM	3998	O	GLY	16	44.215	39.156	90.882	1.00	27.69	E
ATOM	3999	N	GLU	17	42.614	37.595	90.823	1.00	27.06	E
ATOM	4000	H	GLU	17	41.685	37.358	90.610	1.00	0.00	E
ATOM	4001	CA	GLU	17	43.522	36.578	91.311	1.00	27.06	E
ATOM	4002	CB	GLU	17	42.879	35.183	91.211	1.00	39.21	E
ATOM	4003	CG	GLU	17	42.144	34.741	92.468	1.00	39.21	E
ATOM	4004	CD	GLU	17	40.700	35.274	92.524	1.00	39.21	E
ATOM	4005	OE1	GLU	17	39.827	34.613	93.176	1.00	39.21	E
ATOM	4006	OE2	GLU	17	40.447	36.352	91.904	1.00	39.21	E
ATOM	4007	C	GLU	17	44.822	36.592	90.507	1.00	27.06	E
ATOM	4008	O	GLU	17	44.978	37.327	89.530	1.00	39.21	E
ATOM	4009	N	ARG	18	45.757	35.765	90.949	1.00	32.71	E
ATOM	4010	H	ARG	18	45.588	35.240	91.764	1.00	0.00	E
ATOM	4011	CA	ARG	18	47.009	35.621	90.246	1.00	32.71	E
ATOM	4012	CB	ARG	18	48.159	35.406	91.224	1.00	43.07	E
ATOM	4013	CG	ARG	18	49.534	35.507	90.580	1.00	43.07	E
ATOM	4014	CD	ARG	18	50.373	36.613	91.241	1.00	43.07	E
ATOM	4015	NE	ARG	18	51.797	36.267	91.332	1.00	43.07	E
ATOM	4016	HE	ARG	18	52.022	35.382	91.683	1.00	0.00	E
ATOM	4017	CZ	ARG	18	52.787	37.083	90.971	1.00	43.07	E
ATOM	4018	NH1	ARG	18	52.513	38.296	90.494	1.00	43.07	E
ATOM	4019	HH11	ARG	18	53.212	38.836	90.031	1.00	0.00	E
ATOM	4020	HH12	ARG	18	51.610	38.703	90.675	1.00	0.00	E
ATOM	4021	NH2	ARG	18	54.051	36.697	91.069	1.00	43.07	E
ATOM	4022	HH21	ARG	18	54.304	35.749	90.882	1.00	0.00	E
ATOM	4023	HH22	ARG	18	54.649	37.269	91.636	1.00	0.00	E
ATOM	4024	C	ARG	18	46.797	34.362	89.415	1.00	32.71	E
ATOM	4025	O	ARG	18	45.932	33.550	89.708	1.00	43.07	E
ATOM	4026	N	ALA	19	47.576	34.207	88.374	1.00	26.62	E
ATOM	4027	H	ALA	19	48.244	34.877	88.156	1.00	0.00	E
ATOM	4028	CA	ALA	19	47.454	33.032	87.554	1.00	26.62	E
ATOM	4029	CB	ALA	19	46.591	33.317	86.326	1.00	3.84	E

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ATOM	4030	C	ALA	19	48.852	32.659	87.125	1.00	26.62	E
ATOM	4031	O	ALA	19	49.620	33.481	86.602	1.00	3.84	E
ATOM	4032	N	THR	20	49.199	31.418	87.389	1.00	19.85	E
ATOM	4033	H	THR	20	48.590	30.813	87.867	1.00	0.00	E
ATOM	4034	CA	THR	20	50.487	30.937	86.986	1.00	19.85	E
ATOM	4035	CB	THR	20	51.528	31.048	88.119	1.00	27.48	E
ATOM	4036	OG1	THR	20	51.560	29.836	88.882	1.00	27.48	E
ATOM	4037	HG1	THR	20	52.129	29.990	89.646	1.00	0.00	E
ATOM	4038	CG2	THR	20	51.177	32.167	89.031	1.00	27.48	E
ATOM	4039	C	THR	20	50.333	29.501	86.527	1.00	19.85	E
ATOM	4040	O	THR	20	49.795	28.623	87.255	1.00	27.48	E
ATOM	4041	N	ILE	21	50.768	29.302	85.282	1.00	38.09	E
ATOM	4042	H	ILE	21	51.108	30.070	84.794	1.00	0.00	E
ATOM	4043	CA	ILE	21	50.768	28.018	84.582	1.00	38.09	E
ATOM	4044	CB	ILE	21	50.111	28.141	83.193	1.00	11.38	E
ATOM	4045	CG2	ILE	21	50.222	26.807	82.428	1.00	11.38	E
ATOM	4046	CG1	ILE	21	48.645	28.528	83.342	1.00	11.38	E
ATOM	4047	CD1	ILE	21	48.220	29.514	82.297	1.00	11.38	E
ATOM	4048	C	ILE	21	52.228	27.639	84.390	1.00	38.09	E
ATOM	4049	O	ILE	21	53.110	28.524	84.323	1.00	11.38	E
ATOM	4050	N	SER	22	52.496	26.339	84.283	1.00	17.14	E
ATOM	4051	H	SER	22	51.783	25.678	84.322	1.00	0.00	E
ATOM	4052	CA	SER	22	53.880	25.946	84.114	1.00	17.14	E
ATOM	4053	CB	SER	22	54.410	25.368	85.426	1.00	35.33	E
ATOM	4054	OG	SER	22	53.735	24.176	85.748	1.00	35.33	E
ATOM	4055	HG	SER	22	52.798	24.251	85.544	1.00	0.00	E
ATOM	4056	C	SER	22	54.137	25.004	82.950	1.00	17.14	E
ATOM	4057	O	SER	22	53.337	24.120	82.664	1.00	35.33	E
ATOM	4058	N	CYS	23	55.274	25.196	82.286	1.00	3.80	E
ATOM	4059	H	CYS	23	55.872	25.912	82.566	1.00	0.00	E
ATOM	4060	CA	CYS	23	55.647	24.376	81.157	1.00	3.80	E
ATOM	4061	C	CYS	23	56.916	23.625	81.491	1.00	3.80	E
ATOM	4062	O	CYS	23	57.813	24.162	82.158	1.00	22.92	E
ATOM	4063	CB	CYS	23	55.843	25.227	79.897	1.00	22.92	E
ATOM	4064	SG	CYS	23	56.253	24.192	78.464	1.00	22.92	E
ATOM	4065	N	ARG	24	57.008	22.398	80.984	1.00	25.69	E
ATOM	4066	H	ARG	24	56.288	22.077	80.405	1.00	0.00	E
ATOM	4067	CA	ARG	24	58.132	21.526	81.268	1.00	25.69	E
ATOM	4068	CB	ARG	24	57.704	20.582	82.380	1.00	35.62	E
ATOM	4069	CG	ARG	24	58.534	20.698	83.578	1.00	35.62	E
ATOM	4070	CD	ARG	24	59.781	19.914	83.324	1.00	35.62	E
ATOM	4071	NE	ARG	24	60.654	19.914	84.482	1.00	35.62	E
ATOM	4072	HE	ARG	24	61.495	20.405	84.420	1.00	0.00	E
ATOM	4073	CZ	ARG	24	60.382	19.276	85.608	1.00	35.62	E
ATOM	4074	NH1	ARG	24	59.249	18.573	85.745	1.00	35.62	E
ATOM	4075	HH11	ARG	24	59.263	17.574	85.650	1.00	0.00	E
ATOM	4076	HH12	ARG	24	58.466	19.017	86.179	1.00	0.00	E
ATOM	4077	NH2	ARG	24	61.256	19.341	86.595	1.00	35.62	E
ATOM	4078	HH21	ARG	24	61.534	18.498	87.070	1.00	0.00	E
ATOM	4079	HH22	ARG	24	61.793	20.169	86.739	1.00	0.00	E
ATOM	4080	C	ARG	24	58.666	20.718	80.077	1.00	25.69	E
ATOM	4081	O	ARG	24	57.967	19.840	79.555	1.00	35.62	E
ATOM	4082	N	ALA	25	59.914	20.999	79.690	0.00	20.00	E
ATOM	4083	H	ALA	25	60.406	21.684	80.192	1.00	0.00	E
ATOM	4084	CA	ALA	25	60.587	20.340	78.561	0.00	20.00	E
ATOM	4085	CB	ALA	25	61.489	21.346	77.815	0.00	20.00	E

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ATOM	4086	C	ALA	25	61.426	19.142	78.975	0.00	20.00	E
ATOM	4087	O	ALA	25	62.211	19.225	79.913	0.00	20.00	E
ATOM	4088	N	SER	26	61.268	18.038	78.250	0.00	20.00	E
ATOM	4089	H	SER	26	60.618	18.043	77.518	1.00	0.00	E
ATOM	4090	CA	SER	26	62.023	16.814	78.510	0.00	20.00	E
ATOM	4091	CB	SER	26	61.554	15.703	77.568	0.00	20.00	E
ATOM	4092	OG	SER	26	61.492	16.164	76.228	0.00	20.00	E
ATOM	4093	HG	SER	26	62.289	15.919	75.754	1.00	0.00	E
ATOM	4094	C	SER	26	63.527	17.030	78.318	0.00	20.00	E
ATOM	4095	O	SER	26	64.342	16.338	78.928	0.00	20.00	E
ATOM	4096	N	GLN	27	63.884	17.982	77.457	0.00	20.00	E
ATOM	4097	H	GLN	27	63.182	18.488	76.997	1.00	0.00	E
ATOM	4098	CA	GLN	27	65.284	18.304	77.165	0.00	20.00	E
ATOM	4099	CB	GLN	27	65.584	17.996	75.685	0.00	20.00	E
ATOM	4100	CG	GLN	27	66.932	18.499	75.158	0.00	20.00	E
ATOM	4101	CD	GLN	27	67.322	17.882	73.811	0.00	20.00	E
ATOM	4102	OE1	GLN	27	66.730	16.892	73.366	0.00	20.00	E
ATOM	4103	NE2	GLN	27	68.325	18.469	73.159	0.00	20.00	E
ATOM	4104	HE21	GLN	27	68.777	19.237	73.572	1.00	0.00	E
ATOM	4105	HE22	GLN	27	68.577	18.107	72.282	1.00	0.00	E
ATOM	4106	C	GLN	27	65.540	19.784	77.476	0.00	20.00	E
ATOM	4107	O	GLN	27	64.600	20.574	77.595	0.00	20.00	E
ATOM	4108	N	ARG	28	66.810	20.154	77.611	0.00	20.00	E
ATOM	4109	H	ARG	28	67.507	19.479	77.498	1.00	0.00	E
ATOM	4110	CA	ARG	28	67.179	21.534	77.916	0.00	20.00	E
ATOM	4111	CB	ARG	28	68.676	21.622	78.225	0.00	20.00	E
ATOM	4112	CG	ARG	28	69.023	22.606	79.331	0.00	20.00	E
ATOM	4113	CD	ARG	28	69.883	21.951	80.399	0.00	20.00	E
ATOM	4114	NE	ARG	28	69.195	20.841	81.052	0.00	20.00	E
ATOM	4115	HE	ARG	28	68.301	20.597	80.730	1.00	0.00	E
ATOM	4116	CZ	ARG	28	69.704	20.136	82.057	0.00	20.00	E
ATOM	4117	NH1	ARG	28	70.909	20.425	82.529	0.00	20.00	E
ATOM	4118	HH11	ARG	28	71.231	21.371	82.535	1.00	0.00	E
ATOM	4119	HH12	ARG	28	71.489	19.698	82.897	1.00	0.00	E
ATOM	4120	NH2	ARG	28	69.008	19.142	82.592	0.00	20.00	E
ATOM	4121	HH21	ARG	28	68.929	18.269	82.110	1.00	0.00	E
ATOM	4122	HH22	ARG	28	68.548	19.270	83.471	1.00	0.00	E
ATOM	4123	C	ARG	28	66.840	22.483	76.772	0.00	20.00	E
ATOM	4124	O	ARG	28	66.897	22.107	75.601	0.00	20.00	E
ATOM	4125	N	VAL	29	66.487	23.717	77.120	0.00	20.00	E
ATOM	4126	H	VAL	29	66.457	23.954	78.071	1.00	0.00	E
ATOM	4127	CA	VAL	29	66.142	24.726	76.125	0.00	20.00	E
ATOM	4128	CB	VAL	29	64.615	24.791	75.897	0.00	20.00	E
ATOM	4129	CG1	VAL	29	64.138	23.529	75.199	0.00	20.00	E
ATOM	4130	CG2	VAL	29	63.898	24.970	77.223	0.00	20.00	E
ATOM	4131	C	VAL	29	66.628	26.109	76.545	0.00	20.00	E
ATOM	4132	O	VAL	29	66.878	26.970	75.700	0.00	20.00	E
ATOM	4133	N	SER	30	66.763	26.317	77.852	0.00	20.00	E
ATOM	4134	H	SER	30	66.554	25.591	78.475	1.00	0.00	E
ATOM	4135	CA	SER	30	67.215	27.599	78.380	0.00	20.00	E
ATOM	4136	CB	SER	30	68.699	27.806	78.058	0.00	20.00	E
ATOM	4137	OG	SER	30	69.481	26.725	78.537	0.00	20.00	E
ATOM	4138	HG	SER	30	70.376	26.790	78.195	1.00	0.00	E
ATOM	4139	C	SER	30	66.384	28.731	77.779	0.00	20.00	E
ATOM	4140	O	SER	30	65.164	28.616	77.668	0.00	20.00	E
ATOM	4141	N	SER	31	67.043	29.820	77.395	0.00	20.00	E

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ATOM	4142	H	SER	31	68.013	29.885	77.505	1.00	0.00	E
ATOM	4143	CA	SER	31	66.351	30.958	76.801	0.00	20.00	E
ATOM	4144	CB	SER	31	67.276	32.178	76.763	0.00	20.00	E
ATOM	4145	OG	SER	31	68.638	31.787	76.723	0.00	20.00	E
ATOM	4146	HG	SER	31	68.720	30.917	76.328	1.00	0.00	E
ATOM	4147	C	SER	31	65.895	30.611	75.386	0.00	20.00	E
ATOM	4148	O	SER	31	66.487	31.060	74.405	0.00	20.00	E
ATOM	4149	N	ALA	32	64.837	29.813	75.291	1.00	14.83	E
ATOM	4150	H	ALA	32	64.406	29.499	76.113	1.00	0.00	E
ATOM	4151	CA	ALA	32	64.290	29.380	73.992	1.00	14.83	E
ATOM	4152	CB	ALA	32	65.372	28.607	73.212	1.00	20.83	E
ATOM	4153	C	ALA	32	62.924	28.596	73.937	1.00	14.83	E
ATOM	4154	O	ALA	32	62.745	27.684	73.103	1.00	20.83	E
ATOM	4155	N	VAL	33	61.961	28.972	74.793	1.00	27.74	E
ATOM	4156	H	VAL	33	62.172	29.703	75.423	1.00	0.00	E
ATOM	4157	CA	VAL	33	60.598	28.376	74.861	1.00	27.74	E
ATOM	4158	CB	VAL	33	60.369	27.570	76.263	1.00	9.77	E
ATOM	4159	CG1	VAL	33	60.265	28.577	77.395	1.00	9.77	E
ATOM	4160	CG2	VAL	33	59.160	26.608	76.223	1.00	9.77	E
ATOM	4161	C	VAL	33	59.754	29.657	74.801	1.00	27.74	E
ATOM	4162	O	VAL	33	60.236	30.719	75.179	1.00	9.77	E
ATOM	4163	N	HIS	34	58.517	29.607	74.337	1.00	2.00	E
ATOM	4164	H	HIS	34	58.108	28.773	74.046	1.00	0.00	E
ATOM	4165	CA	HIS	34	57.757	30.873	74.255	1.00	2.00	E
ATOM	4166	CB	HIS	34	57.792	31.404	72.798	1.00	26.70	E
ATOM	4167	CG	HIS	34	59.106	31.169	72.114	1.00	26.70	E
ATOM	4168	CD2	HIS	34	59.571	30.106	71.415	1.00	26.70	E
ATOM	4169	ND1	HIS	34	60.169	32.047	72.227	1.00	26.70	E
ATOM	4170	HD1	HIS	34	60.124	32.924	72.676	1.00	0.00	E
ATOM	4171	CE1	HIS	34	61.231	31.530	71.630	1.00	26.70	E
ATOM	4172	NE2	HIS	34	60.895	30.355	71.130	1.00	26.70	E
ATOM	4173	HE2	HIS	34	61.504	29.768	70.645	1.00	0.00	E
ATOM	4174	C	HIS	34	56.363	30.611	74.652	1.00	2.00	E
ATOM	4175	O	HIS	34	55.964	29.446	74.716	1.00	26.70	E
ATOM	4176	N	TRP	35	55.594	31.659	74.901	1.00	19.98	E
ATOM	4177	H	TRP	35	55.918	32.555	74.862	1.00	0.00	E
ATOM	4178	CA	TRP	35	54.199	31.471	75.279	1.00	19.98	E
ATOM	4179	CB	TRP	35	53.961	31.996	76.688	1.00	9.28	E
ATOM	4180	CG	TRP	35	54.731	31.257	77.706	1.00	9.28	E
ATOM	4181	CD2	TRP	35	54.290	30.112	78.465	1.00	9.28	E
ATOM	4182	CE2	TRP	35	55.327	29.796	79.382	1.00	9.28	E
ATOM	4183	CE3	TRP	35	53.125	29.329	78.466	1.00	9.28	E
ATOM	4184	CD1	TRP	35	55.970	31.574	78.167	1.00	9.28	E
ATOM	4185	NE1	TRP	35	56.336	30.704	79.172	1.00	9.28	E
ATOM	4186	HE1	TRP	35	57.183	30.733	79.651	1.00	0.00	E
ATOM	4187	CZ2	TRP	35	55.234	28.725	80.294	1.00	9.28	E
ATOM	4188	CZ3	TRP	35	53.035	28.252	79.382	1.00	9.28	E
ATOM	4189	CH2	TRP	35	54.088	27.971	80.276	1.00	9.28	E
ATOM	4190	C	TRP	35	53.208	32.111	74.315	1.00	19.98	E
ATOM	4191	O	TRP	35	53.453	33.205	73.754	1.00	9.28	E
ATOM	4192	N	TYR	36	52.093	31.400	74.125	1.00	25.70	E
ATOM	4193	H	TYR	36	51.993	30.554	74.586	1.00	0.00	E
ATOM	4194	CA	TYR	36	50.998	31.837	73.256	1.00	25.70	E
ATOM	4195	CB	TYR	36	50.922	30.982	71.986	1.00	8.33	E
ATOM	4196	CG	TYR	36	52.183	31.006	71.154	1.00	8.33	E
ATOM	4197	CD1	TYR	36	52.225	31.739	69.950	1.00	8.33	E



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ATOM	4198	CE1 TYR	36	53.387	31.838	69.224	1.00	8.33	E
ATOM	4199	CD2 TYR	36	53.374	30.355	71.592	1.00	8.33	E
ATOM	4200	CE2 TYR	36	54.550	30.449	70.865	1.00	8.33	E
ATOM	4201	CZ TYR	36	54.542	31.200	69.680	1.00	8.33	E
ATOM	4202	OH TYR	36	55.691	31.336	68.933	1.00	8.33	E
ATOM	4203	HH TYR	36	55.851	30.513	68.455	1.00	0.00	E
ATOM	4204	C TYR	36	49.680	31.699	74.027	1.00	25.70	E
ATOM	4205	O TYR	36	49.537	30.860	74.927	1.00	8.33	E
ATOM	4206	N GLN	37	48.722	32.536	73.670	1.00	3.50	E
ATOM	4207	H GLN	37	48.899	33.195	72.962	1.00	0.00	E
ATOM	4208	CA GLN	37	47.400	32.498	74.288	1.00	3.50	E
ATOM	4209	CB GLN	37	47.114	33.772	75.069	1.00	7.73	E
ATOM	4210	CG GLN	37	45.646	34.067	75.123	1.00	7.73	E
ATOM	4211	CD GLN	37	45.342	35.508	75.411	1.00	7.73	E
ATOM	4212	OE1 GLN	37	45.283	36.331	74.511	1.00	7.73	E
ATOM	4213	NE2 GLN	37	45.132	35.815	76.669	1.00	7.73	E
ATOM	4214	HE21 GLN	37	45.839	36.244	77.187	1.00	0.00	E
ATOM	4215	HE22 GLN	37	44.249	35.588	77.041	1.00	0.00	E
ATOM	4216	C GLN	37	46.421	32.406	73.149	1.00	3.50	E
ATOM	4217	O GLN	37	46.434	33.250	72.265	1.00	7.73	E
ATOM	4218	N GLN	38	45.584	31.377	73.153	1.00	13.14	E
ATOM	4219	H GLN	38	45.628	30.726	73.860	1.00	0.00	E
ATOM	4220	CA GLN	38	44.611	31.233	72.080	1.00	13.14	E
ATOM	4221	CB GLN	38	44.698	29.866	71.459	1.00	2.00	E
ATOM	4222	CG GLN	38	44.132	29.788	70.073	1.00	2.00	E
ATOM	4223	CD GLN	38	44.243	28.388	69.562	1.00	2.00	E
ATOM	4224	OE1 GLN	38	44.197	27.443	70.345	1.00	2.00	E
ATOM	4225	NE2 GLN	38	44.409	28.236	68.268	1.00	2.00	E
ATOM	4226	HE21 GLN	38	44.812	27.409	67.937	1.00	0.00	E
ATOM	4227	HE22 GLN	38	44.124	28.967	67.671	1.00	0.00	E
ATOM	4228	C GLN	38	43.227	31.450	72.599	1.00	13.14	E
ATOM	4229	O GLN	38	42.850	30.853	73.568	1.00	2.00	E
ATOM	4230	N LYS	39	42.494	32.321	71.936	1.00	2.00	E
ATOM	4231	H LYS	39	42.890	32.768	71.154	1.00	0.00	E
ATOM	4232	CA LYS	39	41.126	32.655	72.307	1.00	2.00	E
ATOM	4233	CB LYS	39	40.897	34.176	72.285	1.00	12.56	E
ATOM	4234	CG LYS	39	41.520	34.994	73.415	1.00	12.56	E
ATOM	4235	CD LYS	39	40.967	36.393	73.308	1.00	12.56	E
ATOM	4236	CE LYS	39	41.983	37.503	73.606	1.00	12.56	E
ATOM	4237	NZ LYS	39	42.404	37.646	75.053	1.00	12.56	E
ATOM	4238	HZ1 LYS	39	42.343	36.694	75.505	1.00	0.00	E
ATOM	4239	HZ2 LYS	39	41.766	38.284	75.582	1.00	0.00	E
ATOM	4240	HZ3 LYS	39	43.380	37.967	75.113	1.00	0.00	E
ATOM	4241	C LYS	39	40.217	32.035	71.269	1.00	2.00	E
ATOM	4242	O LYS	39	40.516	32.068	70.079	1.00	12.56	E
ATOM	4243	N PRO	40	39.076	31.494	71.699	1.00	21.69	E
ATOM	4244	CD PRO	40	38.629	31.529	73.092	1.00	9.65	E
ATOM	4245	CA PRO	40	38.088	30.844	70.824	1.00	21.69	E
ATOM	4246	CB PRO	40	36.847	30.741	71.672	1.00	9.65	E
ATOM	4247	CG PRO	40	37.153	31.613	72.893	1.00	9.65	E
ATOM	4248	C PRO	40	37.853	31.658	69.594	1.00	21.69	E
ATOM	4249	O PRO	40	37.645	32.844	69.687	1.00	9.65	E
ATOM	4250	N GLY	41	37.938	30.989	68.450	1.00	21.98	E
ATOM	4251	H GLY	41	38.126	30.024	68.477	1.00	0.00	E
ATOM	4252	CA GLY	41	37.757	31.621	67.165	1.00	21.98	E
ATOM	4253	C GLY	41	39.015	31.958	66.391	1.00	21.98	E

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ATOM	4254	O	GLY	41	39.019	31.882	65.165	1.00	27.16	E
ATOM	4255	N	GLN	42	40.086	32.267	67.118	1.00	28.61	E
ATOM	4256	H	GLN	42	40.014	32.192	68.090	1.00	0.00	E
ATOM	4257	CA	GLN	42	41.361	32.728	66.559	1.00	28.61	E
ATOM	4258	CB	GLN	42	41.708	33.993	67.346	1.00	31.18	E
ATOM	4259	CG	GLN	42	40.480	34.723	67.882	1.00	31.18	E
ATOM	4260	CD	GLN	42	40.824	35.951	68.742	1.00	31.18	E
ATOM	4261	OE1	GLN	42	40.134	36.988	68.698	1.00	31.18	E
ATOM	4262	NE2	GLN	42	41.893	35.835	69.539	1.00	31.18	E
ATOM	4263	HE21	GLN	42	41.741	35.683	70.496	1.00	0.00	E
ATOM	4264	HE22	GLN	42	42.776	35.908	69.138	1.00	0.00	E
ATOM	4265	C	GLN	42	42.619	31.816	66.458	1.00	28.61	E
ATOM	4266	O	GLN	42	42.641	30.732	67.004	1.00	31.18	E
ATOM	4267	N	PRO	43	43.659	32.230	65.696	1.00	2.00	E
ATOM	4268	CD	PRO	43	43.817	33.406	64.825	1.00	3.30	E
ATOM	4269	CA	PRO	43	44.849	31.405	65.612	1.00	2.00	E
ATOM	4270	CB	PRO	43	45.568	31.949	64.414	1.00	3.30	E
ATOM	4271	CG	PRO	43	45.278	33.369	64.480	1.00	3.30	E
ATOM	4272	C	PRO	43	45.570	31.855	66.830	1.00	2.00	E
ATOM	4273	O	PRO	43	45.203	32.842	67.398	1.00	3.30	E
ATOM	4274	N	PRO	44	46.610	31.124	67.254	1.00	2.20	E
ATOM	4275	CD	PRO	44	47.036	29.841	66.679	1.00	20.30	E
ATOM	4276	CA	PRO	44	47.404	31.448	68.427	1.00	2.20	E
ATOM	4277	CB	PRO	44	48.395	30.324	68.495	1.00	20.30	E
ATOM	4278	CG	PRO	44	47.692	29.193	67.849	1.00	20.30	E
ATOM	4279	C	PRO	44	48.050	32.815	68.380	1.00	2.20	E
ATOM	4280	O	PRO	44	48.226	33.407	67.317	1.00	20.30	E
ATOM	4281	N	LYS	45	48.331	33.328	69.571	1.00	19.83	E
ATOM	4282	H	LYS	45	48.145	32.787	70.370	1.00	0.00	E
ATOM	4283	CA	LYS	45	48.897	34.660	69.777	1.00	19.83	E
ATOM	4284	CB	LYS	45	47.838	35.594	70.386	1.00	12.67	E
ATOM	4285	CG	LYS	45	48.003	37.053	70.062	1.00	12.67	E
ATOM	4286	CD	LYS	45	47.959	37.954	71.311	1.00	12.67	E
ATOM	4287	CE	LYS	45	48.593	39.327	71.044	1.00	12.67	E
ATOM	4288	NZ	LYS	45	49.935	39.290	70.278	1.00	12.67	E
ATOM	4289	HZ1	LYS	45	50.554	40.073	70.599	1.00	0.00	E
ATOM	4290	HZ2	LYS	45	49.747	39.393	69.263	1.00	0.00	E
ATOM	4291	HZ3	LYS	45	50.406	38.384	70.459	1.00	0.00	E
ATOM	4292	C	LYS	45	50.095	34.585	70.705	1.00	19.83	E
ATOM	4293	O	LYS	45	50.135	33.786	71.640	1.00	12.67	E
ATOM	4294	N	LEU	46	51.085	35.414	70.425	1.00	23.66	E
ATOM	4295	H	LEU	46	51.016	36.022	69.668	1.00	0.00	E
ATOM	4296	CA	LEU	46	52.281	35.418	71.240	1.00	23.66	E
ATOM	4297	CB	LEU	46	53.534	35.622	70.375	1.00	16.02	E
ATOM	4298	CG	LEU	46	54.742	35.579	71.306	1.00	16.02	E
ATOM	4299	CD1	LEU	46	55.055	34.120	71.621	1.00	16.02	E
ATOM	4300	CD2	LEU	46	55.910	36.304	70.704	1.00	16.02	E
ATOM	4301	C	LEU	46	52.251	36.474	72.331	1.00	23.66	E
ATOM	4302	O	LEU	46	51.794	37.612	72.111	1.00	16.02	E
ATOM	4303	N	LEU	47	52.736	36.097	73.507	1.00	24.58	E
ATOM	4304	H	LEU	47	53.080	35.198	73.620	1.00	0.00	E
ATOM	4305	CA	LEU	47	52.769	37.046	74.595	1.00	24.58	E
ATOM	4306	CB	LEU	47	51.708	36.735	75.655	1.00	23.06	E
ATOM	4307	CG	LEU	47	50.812	35.511	75.533	1.00	23.06	E
ATOM	4308	CD1	LEU	47	50.808	34.765	76.814	1.00	23.06	E
ATOM	4309	CD2	LEU	47	49.394	35.969	75.223	1.00	23.06	E

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ATOM	4310	C	LEU	47	54.139	37.015	75.223	1.00	24.58	E
ATOM	4311	O	LEU	47	54.635	38.039	75.705	1.00	23.06	E
ATOM	4312	N	ILE	48	54.748	35.836	75.224	1.00	19.92	E
ATOM	4313	H	ILE	48	54.328	35.040	74.835	1.00	0.00	E
ATOM	4314	CA	ILE	48	56.062	35.753	75.800	1.00	19.92	E
ATOM	4315	CB	ILE	48	55.957	35.116	77.176	1.00	23.50	E
ATOM	4316	CG2	ILE	48	57.224	34.325	77.506	1.00	23.50	E
ATOM	4317	CG1	ILE	48	55.723	36.203	78.206	1.00	23.50	E
ATOM	4318	CD1	ILE	48	54.394	36.124	78.783	1.00	23.50	E
ATOM	4319	C	ILE	48	57.040	34.989	74.905	1.00	19.92	E
ATOM	4320	O	ILE	48	56.739	33.848	74.519	1.00	23.50	E
ATOM	4321	N	LYS	49	58.163	35.631	74.521	1.00	21.85	E
ATOM	4322	H	LYS	49	58.290	36.560	74.786	1.00	0.00	E
ATOM	4323	CA	LYS	49	59.226	34.958	73.710	1.00	21.85	E
ATOM	4324	CB	LYS	49	59.517	35.636	72.387	1.00	18.23	E
ATOM	4325	CG	LYS	49	60.083	37.011	72.494	1.00	18.23	E
ATOM	4326	CD	LYS	49	59.172	38.005	71.797	1.00	18.23	E
ATOM	4327	CE	LYS	49	59.970	39.110	71.078	1.00	18.23	E
ATOM	4328	NZ	LYS	49	59.834	39.104	69.534	1.00	18.23	E
ATOM	4329	HZ1	LYS	49	59.228	39.890	69.255	1.00	0.00	E
ATOM	4330	HZ2	LYS	49	59.388	38.206	69.215	1.00	0.00	E
ATOM	4331	HZ3	LYS	49	60.769	39.204	69.106	1.00	0.00	E
ATOM	4332	C	LYS	49	60.484	35.009	74.532	1.00	21.85	E
ATOM	4333	O	LYS	49	60.829	36.081	75.015	1.00	18.23	E
ATOM	4334	N	TYR	50	61.114	33.838	74.701	1.00	18.82	E
ATOM	4335	H	TYR	50	60.728	33.058	74.258	1.00	0.00	E
ATOM	4336	CA	TYR	50	62.363	33.620	75.478	1.00	18.82	E
ATOM	4337	CB	TYR	50	63.477	34.656	75.155	1.00	26.82	E
ATOM	4338	CG	TYR	50	63.838	34.665	73.709	1.00	26.82	E
ATOM	4339	CD1	TYR	50	63.494	35.746	72.904	1.00	26.82	E
ATOM	4340	CE1	TYR	50	63.702	35.713	71.553	1.00	26.82	E
ATOM	4341	CD2	TYR	50	64.416	33.544	73.114	1.00	26.82	E
ATOM	4342	CE2	TYR	50	64.629	33.503	71.753	1.00	26.82	E
ATOM	4343	CZ	TYR	50	64.261	34.595	70.988	1.00	26.82	E
ATOM	4344	OH	TYR	50	64.425	34.569	69.630	1.00	26.82	E
ATOM	4345	HH	TYR	50	64.391	35.466	69.292	1.00	0.00	E
ATOM	4346	C	TYR	50	62.169	33.590	76.967	1.00	18.82	E
ATOM	4347	O	TYR	50	62.772	34.371	77.705	1.00	26.82	E
ATOM	4348	N	ALA	51	61.347	32.658	77.404	1.00	19.17	E
ATOM	4349	H	ALA	51	60.931	32.051	76.760	1.00	0.00	E
ATOM	4350	CA	ALA	51	61.047	32.493	78.809	1.00	19.17	E
ATOM	4351	CB	ALA	51	62.252	31.949	79.552	1.00	32.32	E
ATOM	4352	C	ALA	51	60.584	33.758	79.485	1.00	19.17	E
ATOM	4353	O	ALA	51	60.021	33.662	80.574	1.00	32.32	E
ATOM	4354	N	SER	52	60.760	34.933	78.875	1.00	12.06	E
ATOM	4355	H	SER	52	61.112	35.035	77.978	1.00	0.00	E
ATOM	4356	CA	SER	52	60.358	36.118	79.612	1.00	12.06	E
ATOM	4357	CB	SER	52	61.315	36.280	80.750	1.00	30.23	E
ATOM	4358	OG	SER	52	62.482	36.823	80.179	1.00	30.23	E
ATOM	4359	HG	SER	52	63.176	36.161	80.201	1.00	0.00	E
ATOM	4360	C	SER	52	60.268	37.483	78.958	1.00	12.06	E
ATOM	4361	O	SER	52	60.015	38.487	79.644	1.00	30.23	E
ATOM	4362	N	ALA	53	60.493	37.576	77.668	1.00	16.73	E
ATOM	4363	H	ALA	53	60.694	36.783	77.126	1.00	0.00	E
ATOM	4364	CA	ALA	53	60.430	38.898	77.089	1.00	16.73	E
ATOM	4365	CB	ALA	53	61.514	39.048	76.012	1.00	27.67	E

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ATOM	4366	C	ALA	53	59.025	39.139	76.533	1.00	16.73	E
ATOM	4367	O	ALA	53	58.542	38.404	75.668	1.00	27.67	E
ATOM	4368	N	LEU	54	58.365	40.163	77.058	1.00	9.11	E
ATOM	4369	H	LEU	54	58.813	40.725	77.738	1.00	0.00	E
ATOM	4370	CA	LEU	54	57.007	40.479	76.657	1.00	9.11	E
ATOM	4371	CB	LEU	54	56.411	41.521	77.583	1.00	34.96	E
ATOM	4372	CG	LEU	54	55.468	40.915	78.604	1.00	34.96	E
ATOM	4373	CD1	LEU	54	55.946	41.253	80.043	1.00	34.96	E
ATOM	4374	CD2	LEU	54	54.067	41.429	78.324	1.00	34.96	E
ATOM	4375	C	LEU	54	56.948	40.983	75.263	1.00	9.11	E
ATOM	4376	O	LEU	54	57.542	42.015	74.942	1.00	34.96	E
ATOM	4377	N	GLU	55	56.234	40.255	74.414	1.00	15.61	E
ATOM	4378	H	GLU	55	55.801	39.431	74.719	1.00	0.00	E
ATOM	4379	CA	GLU	55	56.079	40.684	73.037	1.00	15.61	E
ATOM	4380	CB	GLU	55	55.387	39.620	72.201	1.00	35.28	E
ATOM	4381	CG	GLU	55	55.297	39.977	70.706	1.00	35.28	E
ATOM	4382	CD	GLU	55	56.651	40.252	70.034	1.00	35.28	E
ATOM	4383	OE1	GLU	55	56.771	40.026	68.796	1.00	35.28	E
ATOM	4384	OE2	GLU	55	57.589	40.706	70.730	1.00	35.28	E
ATOM	4385	C	GLU	55	55.328	42.026	72.953	1.00	15.61	E
ATOM	4386	O	GLU	55	54.368	42.312	73.671	1.00	35.28	E
ATOM	4387	N	SER	56	55.824	42.828	72.037	1.00	11.64	E
ATOM	4388	H	SER	56	56.579	42.487	71.512	1.00	0.00	E
ATOM	4389	CA	SER	56	55.372	44.154	71.768	1.00	11.64	E
ATOM	4390	CB	SER	56	56.099	44.666	70.530	1.00	35.69	E
ATOM	4391	OG	SER	56	57.224	43.828	70.279	1.00	35.69	E
ATOM	4392	HG	SER	56	57.556	43.960	69.387	1.00	0.00	E
ATOM	4393	C	SER	56	53.922	44.377	71.626	1.00	11.64	E
ATOM	4394	O	SER	56	53.422	44.428	70.504	1.00	35.69	E
ATOM	4395	N	GLY	57	53.239	44.532	72.762	1.00	13.73	E
ATOM	4396	H	GLY	57	53.712	44.470	73.613	1.00	0.00	E
ATOM	4397	CA	GLY	57	51.811	44.779	72.733	1.00	13.73	E
ATOM	4398	C	GLY	57	51.073	44.163	73.876	1.00	13.73	E
ATOM	4399	O	GLY	57	50.180	44.772	74.457	1.00	18.54	E
ATOM	4400	N	VAL	58	51.446	42.932	74.196	1.00	40.11	E
ATOM	4401	H	VAL	58	52.162	42.494	73.691	1.00	0.00	E
ATOM	4402	CA	VAL	58	50.815	42.183	75.290	1.00	40.11	E
ATOM	4403	CB	VAL	58	51.652	40.930	75.642	1.00	28.48	E
ATOM	4404	CG1	VAL	58	51.007	40.171	76.797	1.00	28.48	E
ATOM	4405	CG2	VAL	58	51.827	40.056	74.392	1.00	28.48	E
ATOM	4406	C	VAL	58	50.599	42.996	76.562	1.00	40.11	E
ATOM	4407	O	VAL	58	51.386	43.856	76.932	1.00	28.48	E
ATOM	4408	N	PRO	59	49.500	42.745	77.238	1.00	18.31	E
ATOM	4409	CD	PRO	59	48.409	41.820	76.927	1.00	33.87	E
ATOM	4410	CA	PRO	59	49.263	43.495	78.463	1.00	18.31	E
ATOM	4411	CB	PRO	59	47.892	43.013	78.931	1.00	33.87	E
ATOM	4412	CG	PRO	59	47.266	42.407	77.722	1.00	33.87	E
ATOM	4413	C	PRO	59	50.356	43.249	79.501	1.00	18.31	E
ATOM	4414	O	PRO	59	50.940	42.157	79.584	1.00	33.87	E
ATOM	4415	N	ALA	60	50.575	44.288	80.310	1.00	34.77	E
ATOM	4416	H	ALA	60	50.008	45.080	80.187	1.00	0.00	E
ATOM	4417	CA	ALA	60	51.590	44.314	81.351	1.00	34.77	E
ATOM	4418	CB	ALA	60	51.594	45.677	82.031	1.00	25.04	E
ATOM	4419	C	ALA	60	51.486	43.214	82.387	1.00	34.77	E
ATOM	4420	O	ALA	60	52.494	42.666	82.800	1.00	25.04	E
ATOM	4421	N	ARG	61	50.275	42.877	82.801	1.00	22.07	E

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ATOM	4422	H	ARG	61	49.499	43.335	82.421	1.00	0.00	E
ATOM	4423	CA	ARG	61	50.095	41.836	83.808	1.00	22.07	E
ATOM	4424	CB	ARG	61	48.610	41.635	84.086	1.00	35.85	E
ATOM	4425	CG	ARG	61	47.686	41.927	82.916	1.00	35.85	E
ATOM	4426	CD	ARG	61	46.224	41.598	83.293	1.00	35.85	E
ATOM	4427	NE	ARG	61	45.551	40.793	82.277	1.00	35.85	E
ATOM	4428	HE	ARG	61	45.427	39.835	82.455	1.00	0.00	E
ATOM	4429	CZ	ARG	61	45.098	41.275	81.122	1.00	35.85	E
ATOM	4430	NH1	ARG	61	45.232	42.567	80.810	1.00	35.85	E
ATOM	4431	HH11	ARG	61	44.416	43.133	80.644	1.00	0.00	E
ATOM	4432	HH12	ARG	61	46.089	43.029	81.035	1.00	0.00	E
ATOM	4433	NH2	ARG	61	44.513	40.455	80.271	1.00	35.85	E
ATOM	4434	HH21	ARG	61	43.518	40.506	80.147	1.00	0.00	E
ATOM	4435	HH22	ARG	61	45.065	40.000	79.574	1.00	0.00	E
ATOM	4436	C	ARG	61	50.713	40.491	83.446	1.00	22.07	E
ATOM	4437	O	ARG	61	50.813	39.606	84.291	1.00	35.85	E
ATOM	4438	N	PHE	62	51.123	40.350	82.189	1.00	32.53	E
ATOM	4439	H	PHE	62	51.025	41.100	81.574	1.00	0.00	E
ATOM	4440	CA	PHE	62	51.720	39.110	81.700	1.00	32.53	E
ATOM	4441	CB	PHE	62	51.415	38.894	80.216	1.00	28.81	E
ATOM	4442	CG	PHE	62	50.001	38.527	79.953	1.00	28.81	E
ATOM	4443	CD1	PHE	62	49.481	37.318	80.436	1.00	28.81	E
ATOM	4444	CD2	PHE	62	49.162	39.404	79.286	1.00	28.81	E
ATOM	4445	CE1	PHE	62	48.139	36.993	80.259	1.00	28.81	E
ATOM	4446	CE2	PHE	62	47.820	39.083	79.105	1.00	28.81	E
ATOM	4447	CZ	PHE	62	47.309	37.872	79.594	1.00	28.81	E
ATOM	4448	C	PHE	62	53.201	39.144	81.898	1.00	32.53	E
ATOM	4449	O	PHE	62	53.847	40.148	81.574	1.00	28.81	E
ATOM	4450	N	SER	63	53.712	38.031	82.426	1.00	25.68	E
ATOM	4451	H	SER	63	53.109	37.283	82.610	1.00	0.00	E
ATOM	4452	CA	SER	63	55.115	37.860	82.742	1.00	25.68	E
ATOM	4453	CB	SER	63	55.338	38.152	84.206	1.00	20.59	E
ATOM	4454	OG	SER	63	54.349	37.458	84.918	1.00	20.59	E
ATOM	4455	HG	SER	63	54.132	36.633	84.478	1.00	0.00	E
ATOM	4456	C	SER	63	55.479	36.423	82.500	1.00	25.68	E
ATOM	4457	O	SER	63	54.614	35.533	82.603	1.00	20.59	E
ATOM	4458	N	GLY	64	56.762	36.206	82.196	1.00	31.73	E
ATOM	4459	H	GLY	64	57.370	36.973	82.133	1.00	0.00	E
ATOM	4460	CA	GLY	64	57.273	34.867	81.959	1.00	31.73	E
ATOM	4461	C	GLY	64	58.625	34.683	82.634	1.00	31.73	E
ATOM	4462	O	GLY	64	59.481	35.591	82.662	1.00	20.65	E
ATOM	4463	N	SER	65	58.832	33.504	83.201	1.00	11.85	E
ATOM	4464	H	SER	65	58.119	32.828	83.163	1.00	0.00	E
ATOM	4465	CA	SER	65	60.083	33.210	83.887	1.00	11.85	E
ATOM	4466	CB	SER	65	59.918	33.363	85.400	1.00	29.54	E
ATOM	4467	OG	SER	65	58.873	32.519	85.863	1.00	29.54	E
ATOM	4468	HG	SER	65	58.040	32.775	85.451	1.00	0.00	E
ATOM	4469	C	SER	65	60.358	31.785	83.559	1.00	11.85	E
ATOM	4470	O	SER	65	59.450	31.029	83.206	1.00	29.54	E
ATOM	4471	N	GLY	66	61.607	31.388	83.685	1.00	41.56	E
ATOM	4472	H	GLY	66	62.300	31.998	84.010	1.00	0.00	E
ATOM	4473	CA	GLY	66	61.921	30.023	83.334	1.00	41.56	E
ATOM	4474	C	GLY	66	63.401	29.793	83.192	1.00	41.56	E
ATOM	4475	O	GLY	66	64.147	30.620	82.637	1.00	13.61	E
ATOM	4476	N	SER	67	63.773	28.612	83.668	1.00	28.42	E
ATOM	4477	H	SER	67	63.060	28.008	83.979	1.00	0.00	E

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ATOM	4478	CA	SER	67	65.144	28.145	83.755	1.00	28.42	E
ATOM	4479	CB	SER	67	65.475	27.997	85.239	1.00	33.28	E
ATOM	4480	OG	SER	67	64.357	27.397	85.914	1.00	33.28	E
ATOM	4481	HG	SER	67	64.614	27.021	86.767	1.00	0.00	E
ATOM	4482	C	SER	67	65.371	26.807	83.105	1.00	28.42	E
ATOM	4483	O	SER	67	64.643	25.849	83.366	1.00	33.28	E
ATOM	4484	N	GLY	68	66.397	26.735	82.279	1.00	22.50	E
ATOM	4485	H	GLY	68	66.927	27.543	82.108	1.00	0.00	E
ATOM	4486	CA	GLY	68	66.742	25.470	81.642	1.00	22.50	E
ATOM	4487	C	GLY	68	65.636	24.597	81.083	1.00	22.50	E
ATOM	4488	O	GLY	68	65.375	24.606	79.878	1.00	26.63	E
ATOM	4489	N	THR	69	64.967	23.848	81.946	1.00	17.08	E
ATOM	4490	H	THR	69	65.200	23.889	82.893	1.00	0.00	E
ATOM	4491	CA	THR	69	63.892	22.964	81.496	1.00	17.08	E
ATOM	4492	CB	THR	69	64.310	21.514	81.718	1.00	23.62	E
ATOM	4493	OG1	THR	69	63.851	21.054	82.994	1.00	23.62	E
ATOM	4494	HG1	THR	69	62.937	20.762	82.903	1.00	0.00	E
ATOM	4495	CG2	THR	69	65.828	21.432	81.712	1.00	23.62	E
ATOM	4496	C	THR	69	62.527	23.214	82.149	1.00	17.08	E
ATOM	4497	O	THR	69	61.523	22.653	81.731	1.00	23.62	E
ATOM	4498	N	ASP	70	62.471	24.058	83.161	1.00	12.83	E
ATOM	4499	H	ASP	70	63.292	24.493	83.472	1.00	0.00	E
ATOM	4500	CA	ASP	70	61.199	24.321	83.818	1.00	12.83	E
ATOM	4501	CB	ASP	70	61.302	24.016	85.317	1.00	38.22	E
ATOM	4502	CG	ASP	70	61.334	22.529	85.607	1.00	38.22	E
ATOM	4503	OD1	ASP	70	60.279	21.953	85.946	1.00	38.22	E
ATOM	4504	OD2	ASP	70	62.425	21.931	85.494	1.00	38.22	E
ATOM	4505	C	ASP	70	60.798	25.791	83.605	1.00	12.83	E
ATOM	4506	O	ASP	70	61.599	26.700	83.843	1.00	38.22	E
ATOM	4507	N	PHE	71	59.558	26.021	83.162	1.00	23.26	E
ATOM	4508	H	PHE	71	58.964	25.254	83.031	1.00	0.00	E
ATOM	4509	CA	PHE	71	59.090	27.379	82.907	1.00	23.26	E
ATOM	4510	CB	PHE	71	59.108	27.644	81.395	1.00	9.90	E
ATOM	4511	CG	PHE	71	60.459	27.556	80.796	1.00	9.90	E
ATOM	4512	CD1	PHE	71	60.958	26.327	80.367	1.00	9.90	E
ATOM	4513	CD2	PHE	71	61.277	28.662	80.773	1.00	9.90	E
ATOM	4514	CE1	PHE	71	62.230	26.189	79.946	1.00	9.90	E
ATOM	4515	CE2	PHE	71	62.561	28.564	80.358	1.00	9.90	E
ATOM	4516	CZ	PHE	71	63.049	27.306	79.939	1.00	9.90	E
ATOM	4517	C	PHE	71	57.694	27.657	83.498	1.00	23.26	E
ATOM	4518	O	PHE	71	56.930	26.738	83.832	1.00	9.90	E
ATOM	4519	N	THR	72	57.359	28.928	83.632	1.00	17.09	E
ATOM	4520	H	THR	72	57.976	29.632	83.360	1.00	0.00	E
ATOM	4521	CA	THR	72	56.068	29.278	84.192	1.00	17.09	E
ATOM	4522	CB	THR	72	56.158	29.426	85.709	1.00	33.39	E
ATOM	4523	OG1	THR	72	57.249	30.289	86.052	1.00	33.39	E
ATOM	4524	HG1	THR	72	56.909	31.062	86.510	1.00	0.00	E
ATOM	4525	CG2	THR	72	56.390	28.095	86.326	1.00	33.39	E
ATOM	4526	C	THR	72	55.604	30.586	83.607	1.00	17.09	E
ATOM	4527	O	THR	72	56.379	31.536	83.533	1.00	33.39	E
ATOM	4528	N	LEU	73	54.356	30.626	83.158	1.00	23.53	E
ATOM	4529	H	LEU	73	53.797	29.829	83.191	1.00	0.00	E
ATOM	4530	CA	LEU	73	53.794	31.842	82.590	1.00	23.53	E
ATOM	4531	CB	LEU	73	52.957	31.514	81.355	1.00	12.55	E
ATOM	4532	CG	LEU	73	52.317	32.694	80.658	1.00	12.55	E
ATOM	4533	CD1	LEU	73	51.166	33.177	81.498	1.00	12.55	E

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ATOM	4534	CD2 LEU	73	53.331	33.807	80.497	1.00	12.55	E
ATOM	4535	C LEU	73	52.908	32.336	83.706	1.00	23.53	E
ATOM	4536	O LEU	73	52.154	31.557	84.265	1.00	12.55	E
ATOM	4537	N THR	74	52.965	33.615	84.051	1.00	24.15	E
ATOM	4538	H THR	74	53.540	34.251	83.577	1.00	0.00	E
ATOM	4539	CA THR	74	52.118	34.033	85.152	1.00	24.15	E
ATOM	4540	CB THR	74	52.934	34.137	86.445	1.00	25.10	E
ATOM	4541	OG1 THR	74	52.441	35.222	87.233	1.00	25.10	E
ATOM	4542	HG1 THR	74	52.181	34.909	88.104	1.00	0.00	E
ATOM	4543	CG2 THR	74	54.362	34.392	86.150	1.00	25.10	E
ATOM	4544	C THR	74	51.328	35.315	84.965	1.00	24.15	E
ATOM	4545	O THR	74	51.892	36.319	84.515	1.00	25.10	E
ATOM	4546	N ILE	75	50.024	35.260	85.269	1.00	16.00	E
ATOM	4547	H ILE	75	49.588	34.456	85.522	1.00	0.00	E
ATOM	4548	CA ILE	75	49.176	36.434	85.185	1.00	16.00	E
ATOM	4549	CB ILE	75	47.780	36.114	84.657	1.00	7.96	E
ATOM	4550	CG2 ILE	75	47.159	37.377	84.089	1.00	7.96	E
ATOM	4551	CG1 ILE	75	47.845	35.051	83.575	1.00	7.96	E
ATOM	4552	CD1 ILE	75	46.758	35.151	82.536	1.00	7.96	E
ATOM	4553	C ILE	75	49.024	37.062	86.575	1.00	16.00	E
ATOM	4554	O ILE	75	48.371	36.475	87.483	1.00	7.96	E
ATOM	4555	N SER	76	49.623	38.248	86.737	1.00	48.27	E
ATOM	4556	H SER	76	50.090	38.656	85.975	1.00	0.00	E
ATOM	4557	CA SER	76	49.598	38.979	88.009	1.00	48.27	E
ATOM	4558	CB SER	76	50.082	40.427	87.801	1.00	16.77	E
ATOM	4559	OG SER	76	49.599	40.918	86.560	1.00	16.77	E
ATOM	4560	HG SER	76	49.052	41.687	86.704	1.00	0.00	E
ATOM	4561	C SER	76	48.169	38.974	88.549	1.00	48.27	E
ATOM	4562	O SER	76	47.888	38.383	89.590	1.00	16.77	E
ATOM	4563	N SER	77	47.282	39.634	87.807	1.00	25.66	E
ATOM	4564	H SER	77	47.589	40.098	87.002	1.00	0.00	E
ATOM	4565	CA SER	77	45.877	39.720	88.142	1.00	25.66	E
ATOM	4566	CB SER	77	45.552	41.101	88.708	1.00	25.48	E
ATOM	4567	OG SER	77	46.414	42.080	88.148	1.00	25.48	E
ATOM	4568	HG SER	77	47.214	41.668	87.819	1.00	0.00	E
ATOM	4569	C SER	77	45.140	39.497	86.827	1.00	25.66	E
ATOM	4570	O SER	77	45.338	40.212	85.855	1.00	25.48	E
ATOM	4571	N VAL	78	44.296	38.484	86.810	1.00	17.15	E
ATOM	4572	H VAL	78	44.188	37.959	87.633	1.00	0.00	E
ATOM	4573	CA VAL	78	43.523	38.120	85.639	1.00	17.15	E
ATOM	4574	CB VAL	78	42.883	36.744	85.873	1.00	30.86	E
ATOM	4575	CG1 VAL	78	41.578	36.622	85.119	1.00	30.86	E
ATOM	4576	CG2 VAL	78	43.868	35.648	85.486	1.00	30.86	E
ATOM	4577	C VAL	78	42.423	39.105	85.279	1.00	17.15	E
ATOM	4578	O VAL	78	41.815	39.703	86.160	1.00	30.86	E
ATOM	4579	N GLU	79	42.178	39.267	83.977	1.00	14.32	E
ATOM	4580	H GLU	79	42.756	38.804	83.338	1.00	0.00	E
ATOM	4581	CA GLU	79	41.097	40.101	83.457	1.00	14.32	E
ATOM	4582	CB GLU	79	41.611	41.053	82.411	1.00	44.25	E
ATOM	4583	CG GLU	79	42.041	42.389	82.962	1.00	44.25	E
ATOM	4584	CD GLU	79	41.963	43.501	81.888	1.00	44.25	E
ATOM	4585	OE1 GLU	79	41.745	43.160	80.691	1.00	44.25	E
ATOM	4586	OE2 GLU	79	42.110	44.710	82.219	1.00	44.25	E
ATOM	4587	C GLU	79	40.153	39.069	82.828	1.00	14.32	E
ATOM	4588	O GLU	79	40.592	38.040	82.334	1.00	44.25	E
ATOM	4589	N PRO	80	38.847	39.329	82.825	1.00	13.73	E

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ATOM	4590	CD PRO	80	38.128	40.508	83.327	1.00	17.03	E
ATOM	4591	CA PRO	80	37.928	38.359	82.244	1.00	13.73	E
ATOM	4592	CB PRO	80	36.567	39.012	82.416	1.00	17.03	E
ATOM	4593	CG PRO	80	36.748	39.992	83.485	1.00	17.03	E
ATOM	4594	C PRO	80	38.164	37.988	80.796	1.00	13.73	E
ATOM	4595	O PRO	80	37.675	36.947	80.345	1.00	17.03	E
ATOM	4596	N GLU	81	38.883	38.819	80.053	1.00	20.15	E
ATOM	4597	H GLU	81	39.259	39.607	80.483	1.00	0.00	E
ATOM	4598	CA GLU	81	39.104	38.529	78.649	1.00	20.15	E
ATOM	4599	CB GLU	81	39.397	39.793	77.881	1.00	32.36	E
ATOM	4600	CG GLU	81	39.679	41.006	78.765	1.00	32.36	E
ATOM	4601	CD GLU	81	38.476	41.477	79.612	1.00	32.36	E
ATOM	4602	OE1 GLU	81	37.521	42.073	79.066	1.00	32.36	E
ATOM	4603	OE2 GLU	81	38.506	41.254	80.838	1.00	32.36	E
ATOM	4604	C GLU	81	40.237	37.555	78.507	1.00	20.15	E
ATOM	4605	O GLU	81	40.524	37.104	77.414	1.00	32.36	E
ATOM	4606	N ASP	82	40.841	37.186	79.632	1.00	14.47	E
ATOM	4607	H ASP	82	40.527	37.556	80.491	1.00	0.00	E
ATOM	4608	CA ASP	82	41.958	36.258	79.605	1.00	14.47	E
ATOM	4609	CB ASP	82	42.801	36.406	80.885	1.00	10.71	E
ATOM	4610	CG ASP	82	43.612	37.673	80.859	1.00	10.71	E
ATOM	4611	OD1 ASP	82	43.639	38.306	79.787	1.00	10.71	E
ATOM	4612	OD2 ASP	82	44.201	38.082	81.856	1.00	10.71	E
ATOM	4613	C ASP	82	41.566	34.838	79.376	1.00	14.47	E
ATOM	4614	O ASP	82	42.404	33.982	79.187	1.00	10.71	E
ATOM	4615	N PHE	83	40.278	34.578	79.378	1.00	21.93	E
ATOM	4616	H PHE	83	39.624	35.288	79.537	1.00	0.00	E
ATOM	4617	CA PHE	83	39.834	33.211	79.169	1.00	21.93	E
ATOM	4618	CB PHE	83	38.343	33.163	79.033	1.00	4.64	E
ATOM	4619	CG PHE	83	37.880	32.018	78.319	1.00	4.64	E
ATOM	4620	CD1 PHE	83	37.727	30.819	78.954	1.00	4.64	E
ATOM	4621	CD2 PHE	83	37.558	32.114	76.986	1.00	4.64	E
ATOM	4622	CE1 PHE	83	37.257	29.729	78.275	1.00	4.64	E
ATOM	4623	CE2 PHE	83	37.081	30.999	76.304	1.00	4.64	E
ATOM	4624	CZ PHE	83	36.939	29.820	76.970	1.00	4.64	E
ATOM	4625	C PHE	83	40.493	32.764	77.900	1.00	21.93	E
ATOM	4626	O PHE	83	40.555	33.537	76.942	1.00	4.64	E
ATOM	4627	N ALA	84	40.967	31.525	77.874	1.00	3.22	E
ATOM	4628	H ALA	84	40.809	30.930	78.630	1.00	0.00	E
ATOM	4629	CA ALA	84	41.698	31.055	76.695	1.00	3.22	E
ATOM	4630	CB ALA	84	42.525	32.171	76.140	1.00	21.04	E
ATOM	4631	C ALA	84	42.615	29.886	76.983	1.00	3.22	E
ATOM	4632	O ALA	84	42.753	29.435	78.122	1.00	21.04	E
ATOM	4633	N THR	85	43.221	29.344	75.943	1.00	25.05	E
ATOM	4634	H THR	85	43.061	29.674	75.036	1.00	0.00	E
ATOM	4635	CA THR	85	44.132	28.261	76.217	1.00	25.05	E
ATOM	4636	CB THR	85	43.922	27.061	75.328	1.00	11.60	E
ATOM	4637	OG1 THR	85	42.680	26.423	75.657	1.00	11.60	E
ATOM	4638	HG1 THR	85	42.172	26.978	76.258	1.00	0.00	E
ATOM	4639	CG2 THR	85	45.036	26.079	75.580	1.00	11.60	E
ATOM	4640	C THR	85	45.516	28.790	76.032	1.00	25.05	E
ATOM	4641	O THR	85	45.772	29.586	75.144	1.00	11.60	E
ATOM	4642	N TYR	86	46.415	28.375	76.888	1.00	4.02	E
ATOM	4643	H TYR	86	46.184	27.738	77.596	1.00	0.00	E
ATOM	4644	CA TYR	86	47.762	28.882	76.765	1.00	4.02	E
ATOM	4645	CB TYR	86	48.165	29.623	78.064	1.00	2.85	E



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ATOM	4646	CG	TYR	86	47.316	30.855	78.296	1.00	2.85	E
ATOM	4647	CD1	TYR	86	46.045	30.753	78.849	1.00	2.85	E
ATOM	4648	CE1	TYR	86	45.235	31.837	78.995	1.00	2.85	E
ATOM	4649	CD2	TYR	86	47.746	32.105	77.905	1.00	2.85	E
ATOM	4650	CE2	TYR	86	46.925	33.209	78.050	1.00	2.85	E
ATOM	4651	CZ	TYR	86	45.664	33.059	78.587	1.00	2.85	E
ATOM	4652	OH	TYR	86	44.799	34.115	78.586	1.00	2.85	E
ATOM	4653	HH	TYR	86	44.088	33.945	77.943	1.00	0.00	E
ATOM	4654	C	TYR	86	48.765	27.828	76.398	1.00	4.02	E
ATOM	4655	O	TYR	86	48.784	26.744	76.979	1.00	2.85	E
ATOM	4656	N	TYR	87	49.602	28.160	75.434	1.00	13.22	E
ATOM	4657	H	TYR	87	49.551	29.028	75.004	1.00	0.00	E
ATOM	4658	CA	TYR	87	50.638	27.232	74.994	1.00	13.22	E
ATOM	4659	CB	TYR	87	50.429	26.851	73.517	1.00	4.78	E
ATOM	4660	CG	TYR	87	49.051	26.373	73.120	1.00	4.78	E
ATOM	4661	CD1	TYR	87	48.686	25.065	73.287	1.00	4.78	E
ATOM	4662	CE1	TYR	87	47.452	24.616	72.858	1.00	4.78	E
ATOM	4663	CD2	TYR	87	48.150	27.233	72.512	1.00	4.78	E
ATOM	4664	CE2	TYR	87	46.927	26.807	72.085	1.00	4.78	E
ATOM	4665	CZ	TYR	87	46.575	25.489	72.262	1.00	4.78	E
ATOM	4666	OH	TYR	87	45.323	25.052	71.860	1.00	4.78	E
ATOM	4667	HH	TYR	87	45.380	24.699	70.968	1.00	0.00	E
ATOM	4668	C	TYR	87	52.105	27.718	75.136	1.00	13.22	E
ATOM	4669	O	TYR	87	52.419	28.891	74.899	1.00	4.78	E
ATOM	4670	N	CYS	88	52.978	26.806	75.549	1.00	17.16	E
ATOM	4671	H	CYS	88	52.675	25.913	75.828	1.00	0.00	E
ATOM	4672	CA	CYS	88	54.394	27.090	75.603	1.00	17.16	E
ATOM	4673	C	CYS	88	54.905	26.358	74.327	1.00	17.16	E
ATOM	4674	O	CYS	88	54.331	25.343	73.897	1.00	16.28	E
ATOM	4675	CB	CYS	88	55.048	26.516	76.887	1.00	16.28	E
ATOM	4676	SG	CYS	88	54.927	24.711	77.041	1.00	16.28	E
ATOM	4677	N	GLN	89	55.949	26.901	73.696	1.00	21.40	E
ATOM	4678	H	GLN	89	56.346	27.728	74.044	1.00	0.00	E
ATOM	4679	CA	GLN	89	56.537	26.294	72.475	1.00	21.40	E
ATOM	4680	CB	GLN	89	55.890	26.922	71.228	1.00	9.23	E
ATOM	4681	CG	GLN	89	56.523	26.619	69.902	1.00	9.23	E
ATOM	4682	CD	GLN	89	57.598	27.624	69.550	1.00	9.23	E
ATOM	4683	OE1	GLN	89	57.416	28.811	69.764	1.00	9.23	E
ATOM	4684	NE2	GLN	89	58.748	27.137	69.027	1.00	9.23	E
ATOM	4685	HE21	GLN	89	59.596	27.513	69.377	1.00	0.00	E
ATOM	4686	HE22	GLN	89	58.690	26.453	68.346	1.00	0.00	E
ATOM	4687	C	GLN	89	58.054	26.506	72.499	1.00	21.40	E
ATOM	4688	O	GLN	89	58.565	27.631	72.697	1.00	9.23	E
ATOM	4689	N	HIS	90	58.786	25.411	72.345	1.00	25.99	E
ATOM	4690	H	HIS	90	58.350	24.539	72.214	1.00	0.00	E
ATOM	4691	CA	HIS	90	60.261	25.503	72.380	1.00	25.99	E
ATOM	4692	CB	HIS	90	60.912	24.289	73.064	1.00	31.76	E
ATOM	4693	CG	HIS	90	61.293	23.203	72.126	1.00	31.76	E
ATOM	4694	CD2	HIS	90	60.600	22.136	71.663	1.00	31.76	E
ATOM	4695	ND1	HIS	90	62.511	23.178	71.498	1.00	31.76	E
ATOM	4696	HD1	HIS	90	63.240	23.816	71.633	1.00	0.00	E
ATOM	4697	CE1	HIS	90	62.554	22.141	70.677	1.00	31.76	E
ATOM	4698	NE2	HIS	90	61.407	21.492	70.759	1.00	31.76	E
ATOM	4699	HE2	HIS	90	61.183	20.681	70.246	1.00	0.00	E
ATOM	4700	C	HIS	90	60.801	25.652	71.007	1.00	25.99	E
ATOM	4701	O	HIS	90	60.188	25.240	70.014	1.00	31.76	E

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ATOM	4702	N	SER	91	61.949	26.284	70.944	1.00	27.85	E
ATOM	4703	H	SER	91	62.372	26.589	71.753	1.00	0.00	E
ATOM	4704	CA	SER	91	62.586	26.525	69.657	1.00	27.85	E
ATOM	4705	CB	SER	91	62.303	27.971	69.187	1.00	17.33	E
ATOM	4706	OG	SER	91	63.229	28.921	69.718	1.00	17.33	E
ATOM	4707	HG	SER	91	63.857	29.163	69.030	1.00	0.00	E
ATOM	4708	C	SER	91	64.076	26.264	69.806	1.00	27.85	E
ATOM	4709	O	SER	91	64.886	26.820	69.112	1.00	17.33	E
ATOM	4710	N	TRP	92	64.409	25.403	70.743	1.00	26.57	E
ATOM	4711	H	TRP	92	63.705	24.991	71.282	1.00	0.00	E
ATOM	4712	CA	TRP	92	65.790	25.048	71.006	1.00	26.57	E
ATOM	4713	CB	TRP	92	65.882	24.116	72.210	1.00	9.16	E
ATOM	4714	CG	TRP	92	67.273	23.556	72.435	1.00	9.16	E
ATOM	4715	CD2	TRP	92	68.355	24.218	73.107	1.00	9.16	E
ATOM	4716	CE2	TRP	92	69.387	23.280	73.246	1.00	9.16	E
ATOM	4717	CE3	TRP	92	68.539	25.519	73.613	1.00	9.16	E
ATOM	4718	CD1	TRP	92	67.686	22.294	72.185	1.00	9.16	E
ATOM	4719	NE1	TRP	92	68.949	22.117	72.674	1.00	9.16	E
ATOM	4720	HE1	TRP	92	69.462	21.280	72.617	1.00	0.00	E
ATOM	4721	CZ2	TRP	92	70.602	23.583	73.869	1.00	9.16	E
ATOM	4722	CZ3	TRP	92	69.746	25.820	74.236	1.00	9.16	E
ATOM	4723	CH2	TRP	92	70.765	24.848	74.358	1.00	9.16	E
ATOM	4724	C	TRP	92	66.413	24.312	69.856	1.00	26.57	E
ATOM	4725	O	TRP	92	67.648	24.240	69.755	1.00	9.16	E
ATOM	4726	N	GLU	93	65.537	23.758	69.016	1.00	22.26	E
ATOM	4727	H	GLU	93	64.592	23.902	69.175	1.00	0.00	E
ATOM	4728	CA	GLU	93	65.948	22.961	67.890	1.00	22.26	E
ATOM	4729	CB	GLU	93	66.421	21.609	68.399	1.00	45.54	E
ATOM	4730	CG	GLU	93	65.297	20.611	68.422	1.00	45.54	E
ATOM	4731	CD	GLU	93	65.752	19.266	68.872	1.00	45.54	E
ATOM	4732	OE1	GLU	93	66.868	19.203	69.432	1.00	45.54	E
ATOM	4733	OE2	GLU	93	64.992	18.287	68.667	1.00	45.54	E
ATOM	4734	C	GLU	93	64.844	22.721	66.859	1.00	22.26	E
ATOM	4735	O	GLU	93	63.768	23.346	66.908	1.00	45.54	E
ATOM	4736	N	ILE	94	65.130	21.811	65.914	1.00	25.89	E
ATOM	4737	H	ILE	94	66.007	21.372	65.922	1.00	0.00	E
ATOM	4738	CA	ILE	94	64.181	21.460	64.876	1.00	25.89	E
ATOM	4739	CB	ILE	94	64.797	21.550	63.445	1.00	12.86	E
ATOM	4740	CG2	ILE	94	64.037	20.636	62.500	1.00	12.86	E
ATOM	4741	CG1	ILE	94	64.693	22.984	62.909	1.00	12.86	E
ATOM	4742	CD1	ILE	94	64.934	23.108	61.400	1.00	12.86	E
ATOM	4743	C	ILE	94	63.785	20.042	65.168	1.00	25.89	E
ATOM	4744	O	ILE	94	64.642	19.211	65.447	1.00	12.86	E
ATOM	4745	N	PRO	95	62.468	19.755	65.178	1.00	17.13	E
ATOM	4746	CD	PRO	95	61.979	18.387	65.476	1.00	17.56	E
ATOM	4747	CA	PRO	95	61.352	20.682	64.935	1.00	17.13	E
ATOM	4748	CB	PRO	95	60.244	19.765	64.446	1.00	17.56	E
ATOM	4749	CG	PRO	95	60.467	18.513	65.318	1.00	17.56	E
ATOM	4750	C	PRO	95	60.967	21.304	66.256	1.00	17.13	E
ATOM	4751	O	PRO	95	61.124	20.672	67.294	1.00	17.56	E
ATOM	4752	N	PRO	96	60.413	22.536	66.245	1.00	18.86	E
ATOM	4753	CD	PRO	96	60.014	23.419	65.128	1.00	18.16	E
ATOM	4754	CA	PRO	96	60.046	23.105	67.540	1.00	18.86	E
ATOM	4755	CB	PRO	96	59.830	24.580	67.245	1.00	18.16	E
ATOM	4756	CG	PRO	96	59.387	24.603	65.820	1.00	18.16	E
ATOM	4757	C	PRO	96	58.756	22.403	67.869	1.00	18.86	E

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ATOM	4758	O	PRO	96	57.994	22.062	66.968	1.00	18.16	E
ATOM	4759	N	THR	97	58.507	22.163	69.140	1.00	28.79	E
ATOM	4760	H	THR	97	59.145	22.442	69.832	1.00	0.00	E
ATOM	4761	CA	THR	97	57.282	21.503	69.500	1.00	28.79	E
ATOM	4762	CB	THR	97	57.563	20.125	70.155	1.00	4.90	E
ATOM	4763	OG1	THR	97	58.470	20.261	71.253	1.00	4.90	E
ATOM	4764	HG1	THR	97	58.056	20.716	71.990	1.00	0.00	E
ATOM	4765	CG2	THR	97	58.167	19.239	69.148	1.00	4.90	E
ATOM	4766	C	THR	97	56.497	22.400	70.431	1.00	28.79	E
ATOM	4767	O	THR	97	57.048	23.327	71.048	1.00	4.90	E
ATOM	4768	N	PHE	98	55.198	22.145	70.499	1.00	20.19	E
ATOM	4769	H	PHE	98	54.813	21.436	69.954	1.00	0.00	E
ATOM	4770	CA	PHE	98	54.367	22.910	71.389	1.00	20.19	E
ATOM	4771	CB	PHE	98	53.111	23.407	70.703	1.00	2.82	E
ATOM	4772	CG	PHE	98	53.346	24.428	69.642	1.00	2.82	E
ATOM	4773	CD1	PHE	98	53.644	24.043	68.355	1.00	2.82	E
ATOM	4774	CD2	PHE	98	53.105	25.774	69.893	1.00	2.82	E
ATOM	4775	CE1	PHE	98	53.673	24.972	67.318	1.00	2.82	E
ATOM	4776	CE2	PHE	98	53.133	26.714	68.862	1.00	2.82	E
ATOM	4777	CZ	PHE	98	53.412	26.306	67.566	1.00	2.82	E
ATOM	4778	C	PHE	98	54.007	21.955	72.505	1.00	20.19	E
ATOM	4779	O	PHE	98	54.235	20.727	72.412	1.00	2.82	E
ATOM	4780	N	GLY	99	53.472	22.521	73.580	1.00	24.34	E
ATOM	4781	H	GLY	99	53.334	23.494	73.594	1.00	0.00	E
ATOM	4782	CA	GLY	99	53.101	21.707	74.713	1.00	24.34	E
ATOM	4783	C	GLY	99	51.634	21.506	74.559	1.00	24.34	E
ATOM	4784	O	GLY	99	51.022	22.178	73.730	1.00	13.07	E
ATOM	4785	N	GLY	100	51.085	20.583	75.340	1.00	9.43	E
ATOM	4786	H	GLY	100	51.655	20.085	75.950	1.00	0.00	E
ATOM	4787	CA	GLY	100	49.668	20.296	75.294	1.00	9.43	E
ATOM	4788	C	GLY	100	48.634	21.358	75.696	1.00	9.43	E
ATOM	4789	O	GLY	100	47.436	21.065	75.663	1.00	36.22	E
ATOM	4790	N	GLY	101	49.037	22.574	76.059	1.00	23.32	E
ATOM	4791	H	GLY	101	49.991	22.815	76.060	1.00	0.00	E
ATOM	4792	CA	GLY	101	48.036	23.549	76.439	1.00	23.32	E
ATOM	4793	C	GLY	101	47.520	23.388	77.866	1.00	23.32	E
ATOM	4794	O	GLY	101	47.548	22.303	78.479	1.00	14.92	E
ATOM	4795	N	THR	102	47.078	24.515	78.407	1.00	15.16	E
ATOM	4796	H	THR	102	47.122	25.333	77.862	1.00	0.00	E
ATOM	4797	CA	THR	102	46.538	24.610	79.755	1.00	15.16	E
ATOM	4798	CB	THR	102	47.519	25.351	80.779	1.00	14.99	E
ATOM	4799	OG1	THR	102	48.499	24.452	81.306	1.00	14.99	E
ATOM	4800	HG1	THR	102	49.013	24.071	80.587	1.00	0.00	E
ATOM	4801	CG2	THR	102	46.732	25.923	81.966	1.00	14.99	E
ATOM	4802	C	THR	102	45.344	25.540	79.545	1.00	15.16	E
ATOM	4803	O	THR	102	45.506	26.696	79.119	1.00	14.99	E
ATOM	4804	N	LYS	103	44.146	25.047	79.810	1.00	23.54	E
ATOM	4805	H	LYS	103	44.018	24.124	80.078	1.00	0.00	E
ATOM	4806	CA	LYS	103	42.981	25.897	79.679	1.00	23.54	E
ATOM	4807	CB	LYS	103	41.746	25.029	79.366	1.00	19.27	E
ATOM	4808	CG	LYS	103	41.520	24.808	77.890	1.00	19.27	E
ATOM	4809	CD	LYS	103	40.888	23.496	77.573	1.00	19.27	E
ATOM	4810	CE	LYS	103	40.041	23.628	76.292	1.00	19.27	E
ATOM	4811	NZ	LYS	103	39.644	22.318	75.620	1.00	19.27	E
ATOM	4812	HZ1	LYS	103	39.120	22.520	74.755	1.00	0.00	E
ATOM	4813	HZ2	LYS	103	39.072	21.769	76.284	1.00	0.00	E

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ATOM	4814	HZ3	LYS	103	40.510	21.779	75.377	1.00	0.00	E
ATOM	4815	C	LYS	103	42.784	26.731	80.975	1.00	23.54	E
ATOM	4816	O	LYS	103	42.818	26.214	82.124	1.00	19.27	E
ATOM	4817	N	LEU	104	42.611	28.030	80.804	1.00	9.61	E
ATOM	4818	H	LEU	104	42.646	28.425	79.919	1.00	0.00	E
ATOM	4819	CA	LEU	104	42.379	28.876	81.956	1.00	9.61	E
ATOM	4820	CB	LEU	104	43.237	30.135	81.853	1.00	16.97	E
ATOM	4821	CG	LEU	104	42.719	31.416	82.497	1.00	16.97	E
ATOM	4822	CD1	LEU	104	43.463	31.645	83.766	1.00	16.97	E
ATOM	4823	CD2	LEU	104	42.920	32.597	81.556	1.00	16.97	E
ATOM	4824	C	LEU	104	40.907	29.233	81.914	1.00	9.61	E
ATOM	4825	O	LEU	104	40.422	29.756	80.908	1.00	16.97	E
ATOM	4826	N	GLU	105	40.178	28.926	82.974	1.00	27.68	E
ATOM	4827	H	GLU	105	40.591	28.473	83.730	1.00	0.00	E
ATOM	4828	CA	GLU	105	38.758	29.273	83.014	1.00	27.68	E
ATOM	4829	CB	GLU	105	37.936	28.043	83.357	1.00	27.29	E
ATOM	4830	CG	GLU	105	38.545	26.731	82.916	1.00	27.29	E
ATOM	4831	CD	GLU	105	37.584	25.572	83.095	1.00	27.29	E
ATOM	4832	OE1	GLU	105	36.475	25.820	83.626	1.00	27.29	E
ATOM	4833	OE2	GLU	105	37.921	24.428	82.711	1.00	27.29	E
ATOM	4834	C	GLU	105	38.517	30.392	84.059	1.00	27.68	E
ATOM	4835	O	GLU	105	39.222	30.467	85.066	1.00	27.29	E
ATOM	4836	N	ILE	106	37.520	31.244	83.818	1.00	7.59	E
ATOM	4837	H	ILE	106	36.969	31.114	83.014	1.00	0.00	E
ATOM	4838	CA	ILE	106	37.231	32.337	84.719	1.00	7.59	E
ATOM	4839	CB	ILE	106	36.999	33.576	83.999	1.00	9.20	E
ATOM	4840	CG2	ILE	106	36.867	34.702	85.022	1.00	9.20	E
ATOM	4841	CG1	ILE	106	38.086	33.783	82.952	1.00	9.20	E
ATOM	4842	CD1	ILE	106	39.414	33.471	83.412	1.00	9.20	E
ATOM	4843	C	ILE	106	36.056	32.231	85.680	1.00	7.59	E
ATOM	4844	O	ILE	106	34.886	32.266	85.296	1.00	9.20	E
ATOM	4845	N	LYS	107	36.384	32.146	86.956	1.00	18.88	E
ATOM	4846	H	LYS	107	37.331	32.133	87.210	1.00	0.00	E
ATOM	4847	CA	LYS	107	35.387	32.075	87.992	1.00	18.88	E
ATOM	4848	CB	LYS	107	36.099	31.935	89.327	1.00	29.13	E
ATOM	4849	CG	LYS	107	37.043	30.739	89.280	1.00	29.13	E
ATOM	4850	CD	LYS	107	37.053	29.901	90.534	1.00	29.13	E
ATOM	4851	CE	LYS	107	38.117	30.392	91.501	1.00	29.13	E
ATOM	4852	NZ	LYS	107	37.723	30.163	92.953	1.00	29.13	E
ATOM	4853	HZ1	LYS	107	36.984	30.858	93.255	1.00	0.00	E
ATOM	4854	HZ2	LYS	107	38.551	30.283	93.573	1.00	0.00	E
ATOM	4855	HZ3	LYS	107	37.352	29.218	93.038	1.00	0.00	E
ATOM	4856	C	LYS	107	34.507	33.300	87.886	1.00	18.88	E
ATOM	4857	O	LYS	107	34.971	34.340	87.318	1.00	29.13	E
ATOM	4858	N	ARG	108	33.229	33.088	88.381	1.00	2.00	E
ATOM	4859	H	ARG	108	32.819	32.227	88.867	1.00	0.00	E
ATOM	4860	CA	ARG	108	32.235	34.149	88.243	1.00	2.00	E
ATOM	4861	CB	ARG	108	31.909	34.189	86.764	1.00	12.37	E
ATOM	4862	CG	ARG	108	31.071	35.247	86.282	1.00	12.37	E
ATOM	4863	CD	ARG	108	29.904	34.675	85.584	1.00	12.37	E
ATOM	4864	NE	ARG	108	28.746	35.340	86.167	1.00	12.37	E
ATOM	4865	HE	ARG	108	28.155	34.858	86.775	1.00	0.00	E
ATOM	4866	CZ	ARG	108	28.437	36.600	85.913	1.00	12.37	E
ATOM	4867	NH1	ARG	108	29.205	37.289	85.095	1.00	12.37	E
ATOM	4868	HH11	ARG	108	30.047	37.710	85.424	1.00	0.00	E
ATOM	4869	HH12	ARG	108	28.922	37.401	84.140	1.00	0.00	E

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ATOM	4870	NH2	ARG	108	27.411	37.166	86.530	1.00	12.37	E
ATOM	4871	HH21	ARG	108	27.462	37.388	87.506	1.00	0.00	E
ATOM	4872	HH22	ARG	108	26.599	37.437	86.008	1.00	0.00	E
ATOM	4873	C	ARG	108	31.001	33.895	89.062	1.00	2.00	E
ATOM	4874	O	ARG	108	30.688	32.787	89.430	1.00	12.37	E
ATOM	4875	N	THR	109	30.274	34.926	89.358	1.00	2.00	E
ATOM	4876	H	THR	109	30.535	35.819	89.071	1.00	0.00	E
ATOM	4877	CA	THR	109	29.063	34.750	90.157	1.00	2.00	E
ATOM	4878	CB	THR	109	28.550	36.129	90.537	1.00	14.31	E
ATOM	4879	OG1	THR	109	29.262	36.605	91.684	1.00	14.31	E
ATOM	4880	HG1	THR	109	29.617	35.842	92.158	1.00	0.00	E
ATOM	4881	CG2	THR	109	27.096	36.097	90.805	1.00	14.31	E
ATOM	4882	C	THR	109	27.954	34.018	89.409	1.00	2.00	E
ATOM	4883	O	THR	109	27.876	34.057	88.185	1.00	14.31	E
ATOM	4884	N	VAL	110	27.048	33.402	90.151	1.00	9.65	E
ATOM	4885	H	VAL	110	27.121	33.416	91.128	1.00	0.00	E
ATOM	4886	CA	VAL	110	25.943	32.699	89.512	1.00	9.65	E
ATOM	4887	CB	VAL	110	25.096	31.907	90.573	1.00	2.00	E
ATOM	4888	CG1	VAL	110	23.704	31.645	90.037	1.00	2.00	E
ATOM	4889	CG2	VAL	110	25.730	30.601	90.885	1.00	2.00	E
ATOM	4890	C	VAL	110	25.089	33.729	88.770	1.00	9.65	E
ATOM	4891	O	VAL	110	24.969	34.853	89.247	1.00	2.00	E
ATOM	4892	N	ALA	111	24.519	33.378	87.616	1.00	15.04	E
ATOM	4893	H	ALA	111	24.661	32.476	87.281	1.00	0.00	E
ATOM	4894	CA	ALA	111	23.673	34.315	86.846	1.00	15.04	E
ATOM	4895	CB	ALA	111	24.514	35.157	85.952	1.00	5.53	E
ATOM	4896	C	ALA	111	22.603	33.592	86.010	1.00	15.04	E
ATOM	4897	O	ALA	111	22.910	32.678	85.229	1.00	5.53	E
ATOM	4898	N	ALA	112	21.349	34.008	86.173	1.00	7.05	E
ATOM	4899	H	ALA	112	21.198	34.751	86.788	1.00	0.00	E
ATOM	4900	CA	ALA	112	20.221	33.397	85.502	1.00	7.05	E
ATOM	4901	CB	ALA	112	18.950	33.759	86.223	1.00	24.15	E
ATOM	4902	C	ALA	112	20.131	33.812	84.039	1.00	7.05	E
ATOM	4903	O	ALA	112	20.347	34.960	83.713	1.00	24.15	E
ATOM	4904	N	PRO	113	19.749	32.890	83.138	1.00	2.68	E
ATOM	4905	CD	PRO	113	19.337	31.494	83.321	1.00	11.52	E
ATOM	4906	CA	PRO	113	19.678	33.289	81.743	1.00	2.68	E
ATOM	4907	CB	PRO	113	19.537	31.971	81.027	1.00	11.52	E
ATOM	4908	CG	PRO	113	18.831	31.129	81.975	1.00	11.52	E
ATOM	4909	C	PRO	113	18.543	34.221	81.391	1.00	2.68	E
ATOM	4910	O	PRO	113	17.582	34.372	82.130	1.00	11.52	E
ATOM	4911	N	SER	114	18.675	34.860	80.247	1.00	4.54	E
ATOM	4912	H	SER	114	19.506	34.761	79.740	1.00	0.00	E
ATOM	4913	CA	SER	114	17.631	35.726	79.717	1.00	4.54	E
ATOM	4914	CB	SER	114	18.196	37.062	79.294	1.00	9.90	E
ATOM	4915	OG	SER	114	18.328	37.827	80.465	1.00	9.90	E
ATOM	4916	HG	SER	114	18.421	37.234	81.222	1.00	0.00	E
ATOM	4917	C	SER	114	17.136	34.945	78.511	1.00	4.54	E
ATOM	4918	O	SER	114	17.775	34.874	77.467	1.00	9.90	E
ATOM	4919	N	VAL	115	15.965	34.358	78.666	1.00	2.26	E
ATOM	4920	H	VAL	115	15.473	34.556	79.493	1.00	0.00	E
ATOM	4921	CA	VAL	115	15.451	33.510	77.658	1.00	2.26	E
ATOM	4922	CB	VAL	115	14.857	32.331	78.373	1.00	5.89	E
ATOM	4923	CG1	VAL	115	14.140	32.810	79.553	1.00	5.89	E
ATOM	4924	CG2	VAL	115	13.985	31.569	77.469	1.00	5.89	E
ATOM	4925	C	VAL	115	14.543	34.116	76.577	1.00	2.26	E

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ATOM	4926	O	VAL	115	13.479	34.602	76.819	1.00	5.89	E
ATOM	4927	N	PHE	116	15.034	34.056	75.356	1.00	6.09	E
ATOM	4928	H	PHE	116	15.910	33.651	75.222	1.00	0.00	E
ATOM	4929	CA	PHE	116	14.358	34.560	74.193	1.00	6.09	E
ATOM	4930	CB	PHE	116	15.349	35.399	73.463	1.00	8.13	E
ATOM	4931	CG	PHE	116	15.906	36.523	74.306	1.00	8.13	E
ATOM	4932	CD1	PHE	116	15.246	37.721	74.413	1.00	8.13	E
ATOM	4933	CD2	PHE	116	17.119	36.396	74.937	1.00	8.13	E
ATOM	4934	CE1	PHE	116	15.783	38.762	75.121	1.00	8.13	E
ATOM	4935	CE2	PHE	116	17.664	37.439	75.648	1.00	8.13	E
ATOM	4936	CZ	PHE	116	16.986	38.623	75.736	1.00	8.13	E
ATOM	4937	C	PHE	116	13.816	33.437	73.308	1.00	6.09	E
ATOM	4938	O	PHE	116	14.474	32.417	73.142	1.00	8.13	E
ATOM	4939	N	ILE	117	12.603	33.599	72.775	1.00	2.02	E
ATOM	4940	H	ILE	117	12.110	34.430	72.969	1.00	0.00	E
ATOM	4941	CA	ILE	117	11.970	32.582	71.915	1.00	2.02	E
ATOM	4942	CB	ILE	117	10.588	32.086	72.585	1.00	6.22	E
ATOM	4943	CG2	ILE	117	9.425	32.937	72.173	1.00	6.22	E
ATOM	4944	CG1	ILE	117	10.291	30.652	72.177	1.00	6.22	E
ATOM	4945	CD1	ILE	117	10.047	30.534	70.718	1.00	6.22	E
ATOM	4946	C	ILE	117	11.812	33.126	70.467	1.00	2.02	E
ATOM	4947	O	ILE	117	11.456	34.276	70.262	1.00	6.22	E
ATOM	4948	N	PHE	118	12.105	32.314	69.457	1.00	19.88	E
ATOM	4949	H	PHE	118	12.347	31.398	69.664	1.00	0.00	E
ATOM	4950	CA	PHE	118	12.037	32.770	68.030	1.00	19.88	E
ATOM	4951	CB	PHE	118	13.440	32.815	67.411	1.00	2.00	E
ATOM	4952	CG	PHE	118	14.227	33.996	67.843	1.00	2.00	E
ATOM	4953	CD1	PHE	118	13.970	35.250	67.319	1.00	2.00	E
ATOM	4954	CD2	PHE	118	15.186	33.873	68.827	1.00	2.00	E
ATOM	4955	CE1	PHE	118	14.658	36.351	67.778	1.00	2.00	E
ATOM	4956	CE2	PHE	118	15.871	34.969	69.283	1.00	2.00	E
ATOM	4957	CZ	PHE	118	15.609	36.214	68.761	1.00	2.00	E
ATOM	4958	C	PHE	118	11.152	31.976	67.098	1.00	19.88	E
ATOM	4959	O	PHE	118	11.379	30.802	66.864	1.00	2.00	E
ATOM	4960	N	PRO	119	10.132	32.600	66.546	1.00	3.48	E
ATOM	4961	CD	PRO	119	9.563	33.957	66.657	1.00	2.00	E
ATOM	4962	CA	PRO	119	9.331	31.733	65.660	1.00	3.48	E
ATOM	4963	CB	PRO	119	7.953	32.433	65.633	1.00	2.00	E
ATOM	4964	CG	PRO	119	8.089	33.698	66.642	1.00	2.00	E
ATOM	4965	C	PRO	119	9.932	31.602	64.280	1.00	3.48	E
ATOM	4966	O	PRO	119	10.934	32.229	63.996	1.00	2.00	E
ATOM	4967	N	PRO	120	9.387	30.718	63.437	1.00	2.63	E
ATOM	4968	CD	PRO	120	8.379	29.644	63.549	1.00	2.09	E
ATOM	4969	CA	PRO	120	10.017	30.673	62.136	1.00	2.63	E
ATOM	4970	CB	PRO	120	9.691	29.275	61.626	1.00	2.09	E
ATOM	4971	CG	PRO	120	8.379	28.986	62.164	1.00	2.09	E
ATOM	4972	C	PRO	120	9.646	31.755	61.125	1.00	2.63	E
ATOM	4973	O	PRO	120	8.557	32.298	61.062	1.00	2.09	E
ATOM	4974	N	SER	121	10.658	32.004	60.337	1.00	5.67	E
ATOM	4975	H	SER	121	11.458	31.483	60.560	1.00	0.00	E
ATOM	4976	CA	SER	121	10.714	32.905	59.229	1.00	5.67	E
ATOM	4977	CB	SER	121	12.081	32.671	58.587	1.00	17.37	E
ATOM	4978	OG	SER	121	12.767	31.654	59.376	1.00	17.37	E
ATOM	4979	HG	SER	121	13.244	32.044	60.099	1.00	0.00	E
ATOM	4980	C	SER	121	9.623	32.592	58.219	1.00	5.67	E
ATOM	4981	O	SER	121	9.545	31.483	57.747	1.00	17.37	E

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ATOM	4982	N	ASP	122	8.776	33.559	57.900	1.00	18.93	E
ATOM	4983	H	ASP	122	8.843	34.436	58.327	1.00	0.00	E
ATOM	4984	CA	ASP	122	7.763	33.281	56.913	1.00	18.93	E
ATOM	4985	CB	ASP	122	6.941	34.551	56.603	1.00	24.59	E
ATOM	4986	CG	ASP	122	5.689	34.668	57.473	1.00	24.59	E
ATOM	4987	OD1	ASP	122	5.422	33.742	58.271	1.00	24.59	E
ATOM	4988	OD2	ASP	122	4.966	35.696	57.366	1.00	24.59	E
ATOM	4989	C	ASP	122	8.561	32.771	55.688	1.00	18.93	E
ATOM	4990	O	ASP	122	8.198	31.768	55.031	1.00	24.59	E
ATOM	4991	N	GLU	123	9.662	33.458	55.405	1.00	17.46	E
ATOM	4992	H	GLU	123	9.884	34.244	55.939	1.00	0.00	E
ATOM	4993	CA	GLU	123	10.535	33.053	54.303	1.00	17.46	E
ATOM	4994	CB	GLU	123	11.891	33.737	54.437	1.00	35.89	E
ATOM	4995	CG	GLU	123	12.854	33.602	53.259	1.00	35.89	E
ATOM	4996	CD	GLU	123	14.150	34.445	53.481	1.00	35.89	E
ATOM	4997	OE1	GLU	123	15.165	34.236	52.756	1.00	35.89	E
ATOM	4998	OE2	GLU	123	14.156	35.333	54.394	1.00	35.89	E
ATOM	4999	C	GLU	123	10.716	31.533	54.393	1.00	17.46	E
ATOM	5000	O	GLU	123	10.210	30.763	53.572	1.00	35.89	E
ATOM	5001	N	GLN	124	11.430	31.104	55.420	1.00	13.34	E
ATOM	5002	H	GLN	124	11.815	31.749	56.055	1.00	0.00	E
ATOM	5003	CA	GLN	124	11.650	29.696	55.599	1.00	13.34	E
ATOM	5004	CB	GLN	124	12.162	29.420	57.001	1.00	22.75	E
ATOM	5005	CG	GLN	124	13.133	28.319	57.049	1.00	22.75	E
ATOM	5006	CD	GLN	124	12.968	27.495	58.251	1.00	22.75	E
ATOM	5007	OE1	GLN	124	12.372	27.930	59.227	1.00	22.75	E
ATOM	5008	NE2	GLN	124	13.511	26.277	58.212	1.00	22.75	E
ATOM	5009	HE21	GLN	124	14.416	26.185	57.826	1.00	0.00	E
ATOM	5010	HE22	GLN	124	13.000	25.525	58.565	1.00	0.00	E
ATOM	5011	C	GLN	124	10.407	28.835	55.330	1.00	13.34	E
ATOM	5012	O	GLN	124	10.465	27.869	54.529	1.00	22.75	E
ATOM	5013	N	LEU	125	9.297	29.173	55.981	1.00	28.05	E
ATOM	5014	H	LEU	125	9.298	29.948	56.572	1.00	0.00	E
ATOM	5015	CA	LEU	125	8.071	28.417	55.842	1.00	28.05	E
ATOM	5016	CB	LEU	125	6.921	29.215	56.408	1.00	24.16	E
ATOM	5017	CG	LEU	125	7.007	29.190	57.923	1.00	24.16	E
ATOM	5018	CD1	LEU	125	5.876	29.901	58.523	1.00	24.16	E
ATOM	5019	CD2	LEU	125	7.029	27.780	58.363	1.00	24.16	E
ATOM	5020	C	LEU	125	7.766	27.997	54.417	1.00	28.05	E
ATOM	5021	O	LEU	125	7.436	26.827	54.149	1.00	24.16	E
ATOM	5022	N	LYS	126	7.909	28.945	53.505	1.00	32.55	E
ATOM	5023	H	LYS	126	8.190	29.839	53.802	1.00	0.00	E
ATOM	5024	CA	LYS	126	7.684	28.711	52.085	1.00	32.55	E
ATOM	5025	CB	LYS	126	7.915	30.035	51.335	1.00	45.10	E
ATOM	5026	CG	LYS	126	7.196	31.245	51.992	1.00	45.10	E
ATOM	5027	CD	LYS	126	6.082	30.803	52.983	1.00	45.10	E
ATOM	5028	CE	LYS	126	4.908	31.797	53.050	1.00	45.10	E
ATOM	5029	NZ	LYS	126	4.562	32.268	54.459	1.00	45.10	E
ATOM	5030	HZ1	LYS	126	3.878	33.044	54.386	1.00	0.00	E
ATOM	5031	HZ2	LYS	126	5.425	32.583	54.950	1.00	0.00	E
ATOM	5032	HZ3	LYS	126	4.125	31.466	54.957	1.00	0.00	E
ATOM	5033	C	LYS	126	8.588	27.594	51.512	1.00	32.55	E
ATOM	5034	O	LYS	126	8.851	27.545	50.300	1.00	45.10	E
ATOM	5035	N	SER	127	9.023	26.686	52.386	1.00	6.72	E
ATOM	5036	H	SER	127	8.810	26.683	53.319	1.00	0.00	E
ATOM	5037	CA	SER	127	9.898	25.604	51.992	1.00	6.72	E

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ATOM	5038	CB	SER	127	11.311	26.127	52.012	1.00	23.65	E
ATOM	5039	OG	SER	127	11.506	26.887	50.840	1.00	23.65	E
ATOM	5040	HG	SER	127	12.432	27.083	50.733	1.00	0.00	E
ATOM	5041	C	SER	127	9.841	24.336	52.822	1.00	6.72	E
ATOM	5042	O	SER	127	10.805	23.559	52.812	1.00	23.65	E
ATOM	5043	N	GLY	128	8.717	24.091	53.494	1.00	20.85	E
ATOM	5044	H	GLY	128	7.943	24.690	53.404	1.00	0.00	E
ATOM	5045	CA	GLY	128	8.648	22.925	54.369	1.00	20.85	E
ATOM	5046	C	GLY	128	9.473	23.544	55.459	1.00	20.85	E
ATOM	5047	O	GLY	128	9.209	24.690	55.787	1.00	23.71	E
ATOM	5048	N	THR	129	10.486	22.876	55.984	1.00	17.02	E
ATOM	5049	H	THR	129	10.680	21.959	55.670	1.00	0.00	E
ATOM	5050	CA	THR	129	11.329	23.502	57.015	1.00	17.02	E
ATOM	5051	CB	THR	129	12.561	24.209	56.380	1.00	26.48	E
ATOM	5052	OG1	THR	129	12.121	25.072	55.325	1.00	26.48	E
ATOM	5053	HG1	THR	129	11.238	25.407	55.508	1.00	0.00	E
ATOM	5054	CG2	THR	129	13.547	23.216	55.797	1.00	26.48	E
ATOM	5055	C	THR	129	10.621	24.550	57.914	1.00	17.02	E
ATOM	5056	O	THR	129	10.223	25.638	57.481	1.00	26.48	E
ATOM	5057	N	ALA	130	10.462	24.208	59.178	1.00	19.20	E
ATOM	5058	H	ALA	130	10.754	23.323	59.464	1.00	0.00	E
ATOM	5059	CA	ALA	130	9.865	25.123	60.146	1.00	19.20	E
ATOM	5060	CB	ALA	130	8.470	24.617	60.553	1.00	12.73	E
ATOM	5061	C	ALA	130	10.838	25.127	61.359	1.00	19.20	E
ATOM	5062	O	ALA	130	10.915	24.137	62.113	1.00	12.73	E
ATOM	5063	N	SER	131	11.593	26.214	61.520	1.00	12.76	E
ATOM	5064	H	SER	131	11.487	26.966	60.893	1.00	0.00	E
ATOM	5065	CA	SER	131	12.583	26.329	62.607	1.00	12.76	E
ATOM	5066	CB	SER	131	13.977	26.639	62.034	1.00	10.79	E
ATOM	5067	OG	SER	131	14.581	25.510	61.442	1.00	10.79	E
ATOM	5068	HG	SER	131	14.149	25.315	60.596	1.00	0.00	E
ATOM	5069	C	SER	131	12.285	27.392	63.655	1.00	12.76	E
ATOM	5070	O	SER	131	12.274	28.572	63.354	1.00	10.79	E
ATOM	5071	N	VAL	132	12.057	26.985	64.885	1.00	6.67	E
ATOM	5072	H	VAL	132	12.055	26.026	65.095	1.00	0.00	E
ATOM	5073	CA	VAL	132	11.815	27.961	65.950	1.00	6.67	E
ATOM	5074	CB	VAL	132	10.481	27.694	66.679	1.00	6.28	E
ATOM	5075	CG1	VAL	132	9.920	26.357	66.288	1.00	6.28	E
ATOM	5076	CG2	VAL	132	10.654	27.767	68.134	1.00	6.28	E
ATOM	5077	C	VAL	132	13.014	27.899	66.916	1.00	6.67	E
ATOM	5078	O	VAL	132	13.344	26.842	67.441	1.00	6.28	E
ATOM	5079	N	VAL	133	13.672	29.038	67.112	1.00	14.48	E
ATOM	5080	H	VAL	133	13.329	29.855	66.681	1.00	0.00	E
ATOM	5081	CA	VAL	133	14.876	29.109	67.936	1.00	14.48	E
ATOM	5082	CB	VAL	133	15.949	30.036	67.228	1.00	18.10	E
ATOM	5083	CG1	VAL	133	17.158	30.284	68.114	1.00	18.10	E
ATOM	5084	CG2	VAL	133	16.372	29.410	65.944	1.00	18.10	E
ATOM	5085	C	VAL	133	14.640	29.597	69.348	1.00	14.48	E
ATOM	5086	O	VAL	133	13.822	30.474	69.572	1.00	18.10	E
ATOM	5087	N	CYS	134	15.375	29.056	70.301	1.00	2.80	E
ATOM	5088	H	CYS	134	16.045	28.382	70.071	1.00	0.00	E
ATOM	5089	CA	CYS	134	15.195	29.476	71.688	1.00	2.80	E
ATOM	5090	C	CYS	134	16.558	29.915	72.131	1.00	2.80	E
ATOM	5091	O	CYS	134	17.536	29.199	71.884	1.00	12.54	E
ATOM	5092	CB	CYS	134	14.740	28.321	72.594	1.00	12.54	E
ATOM	5093	SG	CYS	134	14.454	28.914	74.291	1.00	12.54	E



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ATOM	5094	N	LEU	135	16.612	31.094	72.758	1.00	2.00	E
ATOM	5095	H	LEU	135	15.784	31.567	72.869	1.00	0.00	E
ATOM	5096	CA	LEU	135	17.843	31.691	73.274	1.00	2.00	E
ATOM	5097	CB	LEU	135	17.979	33.145	72.794	1.00	9.55	E
ATOM	5098	CG	LEU	135	19.208	33.703	72.075	1.00	9.55	E
ATOM	5099	CD1	LEU	135	19.313	35.198	72.283	1.00	9.55	E
ATOM	5100	CD2	LEU	135	20.432	32.992	72.526	1.00	9.55	E
ATOM	5101	C	LEU	135	17.817	31.743	74.784	1.00	2.00	E
ATOM	5102	O	LEU	135	16.783	31.995	75.343	1.00	9.55	E
ATOM	5103	N	LEU	136	18.963	31.527	75.417	1.00	2.44	E
ATOM	5104	H	LEU	136	19.746	31.289	74.884	1.00	0.00	E
ATOM	5105	CA	LEU	136	19.144	31.642	76.876	1.00	2.44	E
ATOM	5106	CB	LEU	136	19.372	30.272	77.508	1.00	10.58	E
ATOM	5107	CG	LEU	136	18.182	29.359	77.752	1.00	10.58	E
ATOM	5108	CD1	LEU	136	17.580	28.996	76.445	1.00	10.58	E
ATOM	5109	CD2	LEU	136	18.608	28.136	78.509	1.00	10.58	E
ATOM	5110	C	LEU	136	20.450	32.447	76.987	1.00	2.44	E
ATOM	5111	O	LEU	136	21.516	31.853	76.926	1.00	10.58	E
ATOM	5112	N	ASN	137	20.405	33.764	77.150	1.00	2.47	E
ATOM	5113	H	ASN	137	19.558	34.241	77.258	1.00	0.00	E
ATOM	5114	CA	ASN	137	21.644	34.524	77.154	1.00	2.47	E
ATOM	5115	CB	ASN	137	21.415	35.851	76.436	1.00	19.39	E
ATOM	5116	CG	ASN	137	22.236	35.957	75.179	1.00	19.39	E
ATOM	5117	OD1	ASN	137	23.332	36.496	75.171	1.00	19.39	E
ATOM	5118	ND2	ASN	137	21.706	35.422	74.108	1.00	19.39	E
ATOM	5119	HD21	ASN	137	21.093	34.660	74.225	1.00	0.00	E
ATOM	5120	HD22	ASN	137	21.935	35.793	73.231	1.00	0.00	E
ATOM	5121	C	ASN	137	22.435	34.782	78.434	1.00	2.47	E
ATOM	5122	O	ASN	137	21.871	35.039	79.455	1.00	19.39	E
ATOM	5123	N	ASN	138	23.754	34.739	78.328	1.00	4.85	E
ATOM	5124	H	ASN	138	24.149	34.529	77.443	1.00	0.00	E
ATOM	5125	CA	ASN	138	24.668	34.986	79.432	1.00	4.85	E
ATOM	5126	CB	ASN	138	24.963	36.441	79.576	1.00	28.71	E
ATOM	5127	CG	ASN	138	24.726	37.153	78.354	1.00	28.71	E
ATOM	5128	OD1	ASN	138	24.222	38.244	78.400	1.00	28.71	E
ATOM	5129	ND2	ASN	138	25.062	36.545	77.214	1.00	28.71	E
ATOM	5130	HD21	ASN	138	24.481	35.839	76.872	1.00	0.00	E
ATOM	5131	HD22	ASN	138	25.886	36.846	76.772	1.00	0.00	E
ATOM	5132	C	ASN	138	24.309	34.528	80.780	1.00	4.85	E
ATOM	5133	O	ASN	138	24.025	35.344	81.648	1.00	28.71	E
ATOM	5134	N	PHE	139	24.381	33.229	80.976	1.00	7.68	E
ATOM	5135	H	PHE	139	24.677	32.645	80.237	1.00	0.00	E
ATOM	5136	CA	PHE	139	24.043	32.668	82.231	1.00	7.68	E
ATOM	5137	CB	PHE	139	22.868	31.708	82.052	1.00	2.39	E
ATOM	5138	CG	PHE	139	23.100	30.606	81.063	1.00	2.39	E
ATOM	5139	CD1	PHE	139	22.666	30.735	79.760	1.00	2.39	E
ATOM	5140	CD2	PHE	139	23.720	29.410	81.458	1.00	2.39	E
ATOM	5141	CE1	PHE	139	22.835	29.694	78.837	1.00	2.39	E
ATOM	5142	CE2	PHE	139	23.910	28.348	80.575	1.00	2.39	E
ATOM	5143	CZ	PHE	139	23.467	28.481	79.247	1.00	2.39	E
ATOM	5144	C	PHE	139	25.287	31.985	82.721	1.00	7.68	E
ATOM	5145	O	PHE	139	26.258	31.869	81.970	1.00	2.39	E
ATOM	5146	N	TYR	140	25.255	31.561	83.983	1.00	9.44	E
ATOM	5147	H	TYR	140	24.441	31.710	84.495	1.00	0.00	E
ATOM	5148	CA	TYR	140	26.378	30.908	84.624	1.00	9.44	E
ATOM	5149	CB	TYR	140	27.489	31.912	84.903	1.00	15.00	E

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ATOM	5150	CG	TYR	140	28.758	31.263	85.361	1.00	15.00	E
ATOM	5151	CD1	TYR	140	29.774	30.985	84.446	1.00	15.00	E
ATOM	5152	CE1	TYR	140	30.929	30.387	84.827	1.00	15.00	E
ATOM	5153	CD2	TYR	140	28.945	30.910	86.702	1.00	15.00	E
ATOM	5154	CE2	TYR	140	30.111	30.306	87.103	1.00	15.00	E
ATOM	5155	CZ	TYR	140	31.105	30.044	86.154	1.00	15.00	E
ATOM	5156	OH	TYR	140	32.279	29.426	86.501	1.00	15.00	E
ATOM	5157	HH	TYR	140	32.270	29.229	87.447	1.00	0.00	E
ATOM	5158	C	TYR	140	25.968	30.333	85.945	1.00	9.44	E
ATOM	5159	O	TYR	140	25.155	30.925	86.644	1.00	15.00	E
ATOM	5160	N	PRO	141	26.486	29.139	86.293	1.00	8.48	E
ATOM	5161	CD	PRO	141	26.203	28.467	87.574	1.00	2.00	E
ATOM	5162	CA	PRO	141	27.402	28.326	85.509	1.00	8.48	E
ATOM	5163	CB	PRO	141	27.782	27.226	86.471	1.00	2.00	E
ATOM	5164	CG	PRO	141	26.620	27.072	87.304	1.00	2.00	E
ATOM	5165	C	PRO	141	26.650	27.800	84.317	1.00	8.48	E
ATOM	5166	O	PRO	141	25.537	28.182	84.073	1.00	2.00	E
ATOM	5167	N	ARG	142	27.279	26.885	83.613	1.00	8.17	E
ATOM	5168	H	ARG	142	28.161	26.592	83.922	1.00	0.00	E
ATOM	5169	CA	ARG	142	26.746	26.309	82.400	1.00	8.17	E
ATOM	5170	CB	ARG	142	27.885	25.717	81.612	1.00	16.58	E
ATOM	5171	CG	ARG	142	27.723	25.985	80.224	1.00	16.58	E
ATOM	5172	CD	ARG	142	28.093	24.787	79.549	1.00	16.58	E
ATOM	5173	NE	ARG	142	29.512	24.618	79.677	1.00	16.58	E
ATOM	5174	HE	ARG	142	29.989	25.114	80.371	1.00	0.00	E
ATOM	5175	CZ	ARG	142	30.221	23.829	78.888	1.00	16.58	E
ATOM	5176	NH1	ARG	142	29.620	23.130	77.898	1.00	16.58	E
ATOM	5177	HH11	ARG	142	29.627	22.131	77.909	1.00	0.00	E
ATOM	5178	HH12	ARG	142	29.358	23.597	77.051	1.00	0.00	E
ATOM	5179	NH2	ARG	142	31.538	23.763	79.088	1.00	16.58	E
ATOM	5180	HH21	ARG	142	31.876	22.960	79.567	1.00	0.00	E
ATOM	5181	HH22	ARG	142	32.132	24.182	78.390	1.00	0.00	E
ATOM	5182	C	ARG	142	25.610	25.327	82.473	1.00	8.17	E
ATOM	5183	O	ARG	142	24.733	25.307	81.617	1.00	16.58	E
ATOM	5184	N	GLU	143	25.598	24.491	83.480	1.00	13.41	E
ATOM	5185	H	GLU	143	26.315	24.513	84.147	1.00	0.00	E
ATOM	5186	CA	GLU	143	24.499	23.530	83.591	1.00	13.41	E
ATOM	5187	CB	GLU	143	24.482	22.908	84.991	0.00	23.44	E
ATOM	5188	CG	GLU	143	24.807	23.885	86.112	0.00	23.44	E
ATOM	5189	CD	GLU	143	25.167	23.187	87.410	0.00	23.44	E
ATOM	5190	OE1	GLU	143	24.369	23.265	88.368	0.00	23.44	E
ATOM	5191	OE2	GLU	143	26.246	22.563	87.473	0.00	23.44	E
ATOM	5192	C	GLU	143	23.182	24.265	83.325	1.00	13.41	E
ATOM	5193	O	GLU	143	22.764	25.154	84.078	1.00	23.44	E
ATOM	5194	N	ALA	144	22.539	23.926	82.232	1.00	3.47	E
ATOM	5195	H	ALA	144	22.917	23.256	81.638	1.00	0.00	E
ATOM	5196	CA	ALA	144	21.255	24.554	81.913	1.00	3.47	E
ATOM	5197	CB	ALA	144	21.477	25.817	81.065	1.00	2.00	E
ATOM	5198	C	ALA	144	20.417	23.527	81.160	1.00	3.47	E
ATOM	5199	O	ALA	144	20.966	22.695	80.497	1.00	2.00	E
ATOM	5200	N	LYS	145	19.097	23.577	81.288	1.00	9.52	E
ATOM	5201	H	LYS	145	18.705	24.256	81.876	1.00	0.00	E
ATOM	5202	CA	LYS	145	18.192	22.638	80.592	1.00	9.52	E
ATOM	5203	CB	LYS	145	17.576	21.642	81.605	1.00	26.18	E
ATOM	5204	CG	LYS	145	17.453	20.190	81.150	1.00	26.18	E
ATOM	5205	CD	LYS	145	16.014	19.829	80.677	1.00	26.18	E

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ATOM	5206	CE	LYS	145	15.940	18.544	79.774	1.00	26.18	E
ATOM	5207	NZ	LYS	145	14.545	17.929	79.628	1.00	26.18	E
ATOM	5208	HZ1	LYS	145	14.625	16.912	79.405	1.00	0.00	E
ATOM	5209	HZ2	LYS	145	14.047	18.405	78.845	1.00	0.00	E
ATOM	5210	HZ3	LYS	145	14.008	18.057	80.507	1.00	0.00	E
ATOM	5211	C	LYS	145	17.050	23.360	79.841	1.00	9.52	E
ATOM	5212	O	LYS	145	16.454	24.286	80.353	1.00	26.18	E
ATOM	5213	N	VAL	146	16.759	22.914	78.621	1.00	8.51	E
ATOM	5214	H	VAL	146	17.281	22.158	78.260	1.00	0.00	E
ATOM	5215	CA	VAL	146	15.714	23.475	77.768	1.00	8.51	E
ATOM	5216	CB	VAL	146	16.291	23.949	76.385	1.00	5.65	E
ATOM	5217	CG1	VAL	146	15.192	24.501	75.510	1.00	5.65	E
ATOM	5218	CG2	VAL	146	17.405	24.965	76.587	1.00	5.65	E
ATOM	5219	C	VAL	146	14.806	22.328	77.450	1.00	8.51	E
ATOM	5220	O	VAL	146	15.251	21.220	77.218	1.00	5.65	E
ATOM	5221	N	GLN	147	13.519	22.591	77.454	1.00	4.16	E
ATOM	5222	H	GLN	147	13.219	23.499	77.685	1.00	0.00	E
ATOM	5223	CA	GLN	147	12.527	21.588	77.124	1.00	4.16	E
ATOM	5224	CB	GLN	147	11.729	21.199	78.358	1.00	35.70	E
ATOM	5225	CG	GLN	147	11.660	19.701	78.651	1.00	35.70	E
ATOM	5226	CD	GLN	147	11.776	19.397	80.139	1.00	35.70	E
ATOM	5227	OE1	GLN	147	12.750	19.776	80.765	1.00	35.70	E
ATOM	5228	NE2	GLN	147	10.778	18.732	80.706	1.00	35.70	E
ATOM	5229	HE21	GLN	147	10.132	19.247	81.247	1.00	0.00	E
ATOM	5230	HE22	GLN	147	10.732	17.769	80.558	1.00	0.00	E
ATOM	5231	C	GLN	147	11.633	22.312	76.126	1.00	4.16	E
ATOM	5232	O	GLN	147	11.255	23.478	76.330	1.00	35.70	E
ATOM	5233	N	TRP	148	11.337	21.638	75.024	1.00	10.61	E
ATOM	5234	H	TRP	148	11.707	20.740	74.906	1.00	0.00	E
ATOM	5235	CA	TRP	148	10.484	22.192	74.016	1.00	10.61	E
ATOM	5236	CB	TRP	148	11.000	21.858	72.660	1.00	2.00	E
ATOM	5237	CG	TRP	148	11.995	22.772	72.181	1.00	2.00	E
ATOM	5238	CD2	TRP	148	11.781	24.089	71.687	1.00	2.00	E
ATOM	5239	CE2	TRP	148	13.035	24.606	71.335	1.00	2.00	E
ATOM	5240	CE3	TRP	148	10.650	24.888	71.511	1.00	2.00	E
ATOM	5241	CD1	TRP	148	13.319	22.547	72.107	1.00	2.00	E
ATOM	5242	NE1	TRP	148	13.962	23.635	71.599	1.00	2.00	E
ATOM	5243	HE1	TRP	148	14.927	23.704	71.450	1.00	0.00	E
ATOM	5244	CZ2	TRP	148	13.197	25.878	70.825	1.00	2.00	E
ATOM	5245	CZ3	TRP	148	10.817	26.147	71.001	1.00	2.00	E
ATOM	5246	CH2	TRP	148	12.087	26.628	70.665	1.00	2.00	E
ATOM	5247	C	TRP	148	9.092	21.588	74.157	1.00	10.61	E
ATOM	5248	O	TRP	148	8.925	20.386	74.143	1.00	2.00	E
ATOM	5249	N	LYS	149	8.081	22.425	74.300	1.00	17.36	E
ATOM	5250	H	LYS	149	8.244	23.391	74.334	1.00	0.00	E
ATOM	5251	CA	LYS	149	6.731	21.915	74.401	1.00	17.36	E
ATOM	5252	CB	LYS	149	6.190	22.166	75.803	1.00	22.03	E
ATOM	5253	CG	LYS	149	7.169	21.708	76.848	1.00	22.03	E
ATOM	5254	CD	LYS	149	6.518	20.957	77.938	1.00	22.03	E
ATOM	5255	CE	LYS	149	6.080	21.902	79.018	1.00	22.03	E
ATOM	5256	NZ	LYS	149	6.954	21.888	80.257	1.00	22.03	E
ATOM	5257	HZ1	LYS	149	7.335	20.935	80.389	1.00	0.00	E
ATOM	5258	HZ2	LYS	149	6.354	22.135	81.078	1.00	0.00	E
ATOM	5259	HZ3	LYS	149	7.704	22.592	80.160	1.00	0.00	E
ATOM	5260	C	LYS	149	5.835	22.551	73.339	1.00	17.36	E
ATOM	5261	O	LYS	149	5.603	23.766	73.342	1.00	22.03	E

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ATOM	5262	N	VAL	150	5.371	21.728	72.399	1.00	36.74	E
ATOM	5263	H	VAL	150	5.655	20.795	72.406	1.00	0.00	E
ATOM	5264	CA	VAL	150	4.459	22.208	71.371	1.00	36.74	E
ATOM	5265	CB	VAL	150	4.589	21.472	70.064	1.00	2.00	E
ATOM	5266	CG1	VAL	150	3.504	21.971	69.146	1.00	2.00	E
ATOM	5267	CG2	VAL	150	5.924	21.776	69.452	1.00	2.00	E
ATOM	5268	C	VAL	150	3.070	22.008	71.969	1.00	36.74	E
ATOM	5269	O	VAL	150	2.799	20.997	72.639	1.00	2.00	E
ATOM	5270	N	ASP	151	2.180	22.958	71.708	1.00	24.86	E
ATOM	5271	H	ASP	151	2.376	23.647	71.048	1.00	0.00	E
ATOM	5272	CA	ASP	151	0.901	22.941	72.393	1.00	24.86	E
ATOM	5273	CB	ASP	151	-0.042	21.882	71.836	1.00	9.37	E
ATOM	5274	CG	ASP	151	-0.770	22.379	70.560	1.00	9.37	E
ATOM	5275	OD1	ASP	151	-0.846	23.601	70.402	1.00	9.37	E
ATOM	5276	OD2	ASP	151	-1.242	21.578	69.715	1.00	9.37	E
ATOM	5277	C	ASP	151	1.392	22.655	73.820	1.00	24.86	E
ATOM	5278	O	ASP	151	2.286	23.383	74.303	1.00	9.37	E
ATOM	5279	N	ASN	152	0.912	21.627	74.501	1.00	18.93	E
ATOM	5280	H	ASN	152	0.244	21.011	74.133	1.00	0.00	E
ATOM	5281	CA	ASN	152	1.426	21.448	75.868	1.00	18.93	E
ATOM	5282	CB	ASN	152	0.274	21.362	76.863	1.00	18.25	E
ATOM	5283	CG	ASN	152	0.215	22.560	77.756	1.00	18.25	E
ATOM	5284	OD1	ASN	152	1.239	23.063	78.218	1.00	18.25	E
ATOM	5285	ND2	ASN	152	-0.981	23.035	78.014	1.00	18.25	E
ATOM	5286	HD21	ASN	152	-1.523	23.412	77.310	1.00	0.00	E
ATOM	5287	HD22	ASN	152	-1.280	22.978	78.968	1.00	0.00	E
ATOM	5288	C	ASN	152	2.304	20.221	76.059	1.00	18.93	E
ATOM	5289	O	ASN	152	2.645	19.877	77.180	1.00	18.25	E
ATOM	5290	N	ALA	153	2.668	19.588	74.947	1.00	20.36	E
ATOM	5291	H	ALA	153	2.426	19.979	74.088	1.00	0.00	E
ATOM	5292	CA	ALA	153	3.414	18.344	74.952	1.00	20.36	E
ATOM	5293	CB	ALA	153	2.963	17.505	73.768	1.00	2.00	E
ATOM	5294	C	ALA	153	4.905	18.503	74.934	1.00	20.36	E
ATOM	5295	O	ALA	153	5.447	19.336	74.208	1.00	2.00	E
ATOM	5296	N	LEU	154	5.554	17.670	75.736	1.00	14.58	E
ATOM	5297	H	LEU	154	5.033	17.040	76.271	1.00	0.00	E
ATOM	5298	CA	LEU	154	7.006	17.639	75.873	1.00	14.58	E
ATOM	5299	CB	LEU	154	7.347	16.869	77.145	1.00	13.26	E
ATOM	5300	CG	LEU	154	8.844	16.842	77.402	1.00	13.26	E
ATOM	5301	CD1	LEU	154	9.517	15.839	76.432	1.00	13.26	E
ATOM	5302	CD2	LEU	154	9.450	18.279	77.241	1.00	13.26	E
ATOM	5303	C	LEU	154	7.619	16.945	74.640	1.00	14.58	E
ATOM	5304	O	LEU	154	7.438	15.746	74.454	1.00	13.26	E
ATOM	5305	N	GLN	155	8.358	17.671	73.808	1.00	7.72	E
ATOM	5306	H	GLN	155	8.531	18.611	74.004	1.00	0.00	E
ATOM	5307	CA	GLN	155	8.932	17.077	72.596	1.00	7.72	E
ATOM	5308	CB	GLN	155	9.342	18.159	71.632	1.00	10.21	E
ATOM	5309	CG	GLN	155	8.261	19.150	71.384	1.00	10.21	E
ATOM	5310	CD	GLN	155	7.089	18.555	70.646	1.00	10.21	E
ATOM	5311	OE1	GLN	155	5.975	18.431	71.190	1.00	10.21	E
ATOM	5312	NE2	GLN	155	7.320	18.182	69.399	1.00	10.21	E
ATOM	5313	HE21	GLN	155	7.847	17.373	69.238	1.00	0.00	E
ATOM	5314	HE22	GLN	155	6.938	18.736	68.687	1.00	0.00	E
ATOM	5315	C	GLN	155	10.085	16.133	72.806	1.00	7.72	E
ATOM	5316	O	GLN	155	10.699	16.121	73.877	1.00	10.21	E
ATOM	5317	N	SER	156	10.370	15.324	71.781	1.00	9.59	E

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ATOM	5318	H	SER	156	9.853	15.380	70.950	1.00	0.00	E
ATOM	5319	CA	SER	156	11.440	14.359	71.882	1.00	9.59	E
ATOM	5320	CB	SER	156	10.828	12.981	72.084	1.00	32.14	E
ATOM	5321	OG	SER	156	10.145	12.960	73.318	1.00	32.14	E
ATOM	5322	HG	SER	156	9.919	12.054	73.550	1.00	0.00	E
ATOM	5323	C	SER	156	12.613	14.258	70.880	1.00	9.59	E
ATOM	5324	O	SER	156	13.756	14.276	71.301	1.00	32.14	E
ATOM	5325	N	GLY	157	12.400	14.107	69.589	1.00	9.18	E
ATOM	5326	H	GLY	157	11.496	14.080	69.203	1.00	0.00	E
ATOM	5327	CA	GLY	157	13.595	13.983	68.765	1.00	9.18	E
ATOM	5328	C	GLY	157	13.733	15.009	67.659	1.00	9.18	E
ATOM	5329	O	GLY	157	14.280	14.677	66.620	1.00	14.37	E
ATOM	5330	N	ASN	158	13.239	16.238	67.885	1.00	2.61	E
ATOM	5331	H	ASN	158	12.843	16.433	68.761	1.00	0.00	E
ATOM	5332	CA	ASN	158	13.268	17.295	66.889	1.00	2.61	E
ATOM	5333	CB	ASN	158	11.842	17.501	66.405	1.00	28.60	E
ATOM	5334	CG	ASN	158	11.386	16.380	65.466	1.00	28.60	E
ATOM	5335	OD1	ASN	158	11.544	15.188	65.777	1.00	28.60	E
ATOM	5336	ND2	ASN	158	10.831	16.756	64.301	1.00	28.60	E
ATOM	5337	HD21	ASN	158	9.851	16.802	64.267	1.00	0.00	E
ATOM	5338	HD22	ASN	158	11.416	16.965	63.548	1.00	0.00	E
ATOM	5339	C	ASN	158	13.903	18.607	67.330	1.00	2.61	E
ATOM	5340	O	ASN	158	13.449	19.678	66.963	1.00	28.60	E
ATOM	5341	N	SER	159	14.971	18.499	68.124	1.00	2.00	E
ATOM	5342	H	SER	159	15.289	17.597	68.364	1.00	0.00	E
ATOM	5343	CA	SER	159	15.700	19.664	68.656	1.00	2.00	E
ATOM	5344	CB	SER	159	15.252	19.949	70.094	1.00	6.58	E
ATOM	5345	OG	SER	159	16.368	19.821	70.981	1.00	6.58	E
ATOM	5346	HG	SER	159	16.864	20.642	70.974	1.00	0.00	E
ATOM	5347	C	SER	159	17.217	19.431	68.657	1.00	2.00	E
ATOM	5348	O	SER	159	17.672	18.309	68.780	1.00	6.58	E
ATOM	5349	N	GLN	160	17.975	20.516	68.540	1.00	7.73	E
ATOM	5350	H	GLN	160	17.492	21.361	68.434	1.00	0.00	E
ATOM	5351	CA	GLN	160	19.461	20.567	68.549	1.00	7.73	E
ATOM	5352	CB	GLN	160	20.018	20.720	67.164	1.00	16.07	E
ATOM	5353	CG	GLN	160	19.623	19.669	66.235	1.00	16.07	E
ATOM	5354	CD	GLN	160	20.784	18.796	65.969	1.00	16.07	E
ATOM	5355	OE1	GLN	160	21.200	18.647	64.812	1.00	16.07	E
ATOM	5356	NE2	GLN	160	21.370	18.217	67.051	1.00	16.07	E
ATOM	5357	HE21	GLN	160	22.164	17.658	66.904	1.00	0.00	E
ATOM	5358	HE22	GLN	160	20.982	18.392	67.923	1.00	0.00	E
ATOM	5359	C	GLN	160	19.894	21.844	69.285	1.00	7.73	E
ATOM	5360	O	GLN	160	19.241	22.895	69.178	1.00	16.07	E
ATOM	5361	N	GLU	161	20.989	21.742	70.030	1.00	2.56	E
ATOM	5362	H	GLU	161	21.455	20.883	70.097	1.00	0.00	E
ATOM	5363	CA	GLU	161	21.527	22.882	70.748	1.00	2.56	E
ATOM	5364	CB	GLU	161	20.924	22.987	72.111	1.00	10.84	E
ATOM	5365	CG	GLU	161	20.970	21.744	72.808	1.00	10.84	E
ATOM	5366	CD	GLU	161	21.053	21.962	74.280	1.00	10.84	E
ATOM	5367	OE1	GLU	161	22.179	21.756	74.793	1.00	10.84	E
ATOM	5368	OE2	GLU	161	20.027	22.344	74.920	1.00	10.84	E
ATOM	5369	C	GLU	161	23.027	22.934	70.865	1.00	2.56	E
ATOM	5370	O	GLU	161	23.727	21.978	70.649	1.00	10.84	E
ATOM	5371	N	SER	162	23.513	24.114	71.137	1.00	10.53	E
ATOM	5372	H	SER	162	22.925	24.893	71.234	1.00	0.00	E
ATOM	5373	CA	SER	162	24.930	24.285	71.302	1.00	10.53	E

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ATOM	5374	CB	SER	162	25.587	24.541	69.935	1.00	15.87	E
ATOM	5375	OG	SER	162	25.964	25.881	69.752	1.00	15.87	E
ATOM	5376	HG	SER	162	25.734	26.150	68.854	1.00	0.00	E
ATOM	5377	C	SER	162	25.126	25.439	72.281	1.00	10.53	E
ATOM	5378	O	SER	162	24.229	26.294	72.464	1.00	15.87	E
ATOM	5379	N	VAL	163	26.261	25.415	72.949	1.00	3.68	E
ATOM	5380	H	VAL	163	26.917	24.725	72.784	1.00	0.00	E
ATOM	5381	CA	VAL	163	26.571	26.438	73.924	1.00	3.68	E
ATOM	5382	CB	VAL	163	26.800	25.841	75.326	1.00	7.65	E
ATOM	5383	CG1	VAL	163	28.183	25.348	75.456	1.00	7.65	E
ATOM	5384	CG2	VAL	163	26.591	26.872	76.344	1.00	7.65	E
ATOM	5385	C	VAL	163	27.823	27.217	73.518	1.00	3.68	E
ATOM	5386	O	VAL	163	28.667	26.718	72.759	1.00	7.65	E
ATOM	5387	N	THR	164	27.938	28.440	74.007	1.00	12.79	E
ATOM	5388	H	THR	164	27.261	28.799	74.598	1.00	0.00	E
ATOM	5389	CA	THR	164	29.083	29.234	73.671	1.00	12.79	E
ATOM	5390	CB	THR	164	28.779	30.685	73.805	1.00	2.00	E
ATOM	5391	OG1	THR	164	28.257	30.948	75.096	1.00	2.00	E
ATOM	5392	HG1	THR	164	28.954	31.263	75.671	1.00	0.00	E
ATOM	5393	CG2	THR	164	27.819	31.066	72.814	1.00	2.00	E
ATOM	5394	C	THR	164	30.225	28.930	74.592	1.00	12.79	E
ATOM	5395	O	THR	164	30.054	28.298	75.616	1.00	2.00	E
ATOM	5396	N	GLU	165	31.401	29.367	74.179	1.00	19.21	E
ATOM	5397	H	GLU	165	31.467	29.792	73.296	1.00	0.00	E
ATOM	5398	CA	GLU	165	32.607	29.257	74.971	1.00	19.21	E
ATOM	5399	CB	GLU	165	33.797	29.509	74.056	1.00	27.72	E
ATOM	5400	CG	GLU	165	35.130	29.250	74.663	1.00	27.72	E
ATOM	5401	CD	GLU	165	35.599	27.829	74.431	1.00	27.72	E
ATOM	5402	OE1	GLU	165	34.735	27.061	73.931	1.00	27.72	E
ATOM	5403	OE2	GLU	165	36.789	27.494	74.745	1.00	27.72	E
ATOM	5404	C	GLU	165	32.380	30.455	75.922	1.00	19.21	E
ATOM	5405	O	GLU	165	31.537	31.328	75.666	1.00	27.72	E
ATOM	5406	N	GLN	166	33.101	30.509	77.017	1.00	2.00	E
ATOM	5407	H	GLN	166	33.757	29.800	77.203	1.00	0.00	E
ATOM	5408	CA	GLN	166	32.940	31.612	77.932	1.00	2.00	E
ATOM	5409	CB	GLN	166	33.838	31.440	79.096	1.00	2.00	E
ATOM	5410	CG	GLN	166	33.210	30.757	80.188	1.00	2.00	E
ATOM	5411	CD	GLN	166	33.959	30.983	81.439	1.00	2.00	E
ATOM	5412	OE1	GLN	166	35.091	30.499	81.625	1.00	2.00	E
ATOM	5413	NE2	GLN	166	33.335	31.744	82.339	1.00	2.00	E
ATOM	5414	HE21	GLN	166	32.648	31.322	82.893	1.00	0.00	E
ATOM	5415	HE22	GLN	166	33.587	32.684	82.403	1.00	0.00	E
ATOM	5416	C	GLN	166	33.211	32.994	77.375	1.00	2.00	E
ATOM	5417	O	GLN	166	34.198	33.230	76.698	1.00	2.00	E
ATOM	5418	N	ASP	167	32.331	33.934	77.695	1.00	3.31	E
ATOM	5419	H	ASP	167	31.551	33.698	78.254	1.00	0.00	E
ATOM	5420	CA	ASP	167	32.522	35.293	77.230	1.00	3.31	E
ATOM	5421	CB	ASP	167	31.364	36.195	77.689	1.00	29.58	E
ATOM	5422	CG	ASP	167	31.412	37.596	77.070	1.00	29.58	E
ATOM	5423	OD1	ASP	167	31.355	37.705	75.831	1.00	29.58	E
ATOM	5424	OD2	ASP	167	31.503	38.591	77.822	1.00	29.58	E
ATOM	5425	C	ASP	167	33.833	35.836	77.765	1.00	3.31	E
ATOM	5426	O	ASP	167	34.329	35.458	78.819	1.00	29.58	E
ATOM	5427	N	SER	168	34.363	36.755	76.994	1.00	10.25	E
ATOM	5428	H	SER	168	33.890	37.005	76.180	1.00	0.00	E
ATOM	5429	CA	SER	168	35.621	37.413	77.278	1.00	10.25	E

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ATOM	5430	CB	SER	168	36.164	37.969	75.954	1.00	15.97	E
ATOM	5431	OG	SER	168	35.122	38.061	74.990	1.00	15.97	E
ATOM	5432	HG	SER	168	35.084	38.948	74.629	1.00	0.00	E
ATOM	5433	C	SER	168	35.435	38.551	78.296	1.00	10.25	E
ATOM	5434	O	SER	168	36.328	38.850	79.086	1.00	15.97	E
ATOM	5435	N	LYS	169	34.256	39.157	78.236	1.00	15.69	E
ATOM	5436	H	LYS	169	33.621	38.826	77.577	1.00	0.00	E
ATOM	5437	CA	LYS	169	33.845	40.270	79.074	1.00	15.69	E
ATOM	5438	CB	LYS	169	32.878	41.125	78.262	1.00	13.14	E
ATOM	5439	CG	LYS	169	33.511	42.168	77.341	1.00	13.14	E
ATOM	5440	CD	LYS	169	33.040	42.053	75.888	1.00	13.14	E
ATOM	5441	CE	LYS	169	31.670	41.237	75.689	1.00	13.14	E
ATOM	5442	NZ	LYS	169	31.171	40.914	74.250	1.00	13.14	E
ATOM	5443	HZ1	LYS	169	31.277	39.893	74.102	1.00	0.00	E
ATOM	5444	HZ2	LYS	169	31.739	41.429	73.550	1.00	0.00	E
ATOM	5445	HZ3	LYS	169	30.169	41.166	74.154	1.00	0.00	E
ATOM	5446	C	LYS	169	33.212	39.965	80.458	1.00	15.69	E
ATOM	5447	O	LYS	169	33.591	40.594	81.453	1.00	13.14	E
ATOM	5448	N	ASP	170	32.250	39.022	80.513	1.00	2.00	E
ATOM	5449	H	ASP	170	32.021	38.547	79.690	1.00	0.00	E
ATOM	5450	CA	ASP	170	31.524	38.654	81.753	1.00	2.00	E
ATOM	5451	CB	ASP	170	30.067	38.988	81.576	1.00	16.80	E
ATOM	5452	CG	ASP	170	29.451	38.261	80.411	1.00	16.80	E
ATOM	5453	OD1	ASP	170	30.151	37.356	79.925	1.00	16.80	E
ATOM	5454	OD2	ASP	170	28.293	38.584	79.990	1.00	16.80	E
ATOM	5455	C	ASP	170	31.599	37.212	82.218	1.00	2.00	E
ATOM	5456	O	ASP	170	30.973	36.832	83.191	1.00	16.80	E
ATOM	5457	N	SER	171	32.319	36.380	81.499	1.00	6.23	E
ATOM	5458	H	SER	171	32.760	36.707	80.687	1.00	0.00	E
ATOM	5459	CA	SER	171	32.474	34.975	81.872	1.00	6.23	E
ATOM	5460	CB	SER	171	33.099	34.921	83.278	1.00	23.86	E
ATOM	5461	OG	SER	171	34.222	35.785	83.373	1.00	23.86	E
ATOM	5462	HG	SER	171	33.914	36.685	83.520	1.00	0.00	E
ATOM	5463	C	SER	171	31.221	34.071	81.792	1.00	6.23	E
ATOM	5464	O	SER	171	31.258	32.911	82.194	1.00	23.86	E
ATOM	5465	N	THR	172	30.127	34.599	81.257	1.00	2.00	E
ATOM	5466	H	THR	172	30.167	35.520	80.939	1.00	0.00	E
ATOM	5467	CA	THR	172	28.869	33.834	81.133	1.00	2.00	E
ATOM	5468	CB	THR	172	27.659	34.796	81.013	1.00	3.54	E
ATOM	5469	OG1	THR	172	27.762	35.526	79.801	1.00	3.54	E
ATOM	5470	HG1	THR	172	28.244	35.022	79.151	1.00	0.00	E
ATOM	5471	CG2	THR	172	27.645	35.790	82.161	1.00	3.54	E
ATOM	5472	C	THR	172	28.854	32.915	79.932	1.00	2.00	E
ATOM	5473	O	THR	172	29.806	32.893	79.140	1.00	3.54	E
ATOM	5474	N	TYR	173	27.775	32.164	79.786	1.00	2.00	E
ATOM	5475	H	TYR	173	27.072	32.231	80.424	1.00	0.00	E
ATOM	5476	CA	TYR	173	27.629	31.246	78.649	1.00	2.00	E
ATOM	5477	CB	TYR	173	27.388	29.836	79.099	1.00	10.71	E
ATOM	5478	CG	TYR	173	28.606	29.263	79.735	1.00	10.71	E
ATOM	5479	CD1	TYR	173	29.666	28.843	78.970	1.00	10.71	E
ATOM	5480	CE1	TYR	173	30.784	28.323	79.568	1.00	10.71	E
ATOM	5481	CD2	TYR	173	28.700	29.155	81.118	1.00	10.71	E
ATOM	5482	CE2	TYR	173	29.835	28.631	81.732	1.00	10.71	E
ATOM	5483	CZ	TYR	173	30.870	28.210	80.955	1.00	10.71	E
ATOM	5484	OH	TYR	173	31.964	27.628	81.522	1.00	10.71	E
ATOM	5485	HH	TYR	173	31.770	27.390	82.422	1.00	0.00	E

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ATOM	5486	C	TYR	173	26.453	31.709	77.895	1.00	2.00	E
ATOM	5487	O	TYR	173	25.919	32.765	78.231	1.00	10.71	E
ATOM	5488	N	SER	174	26.088	30.998	76.842	1.00	2.30	E
ATOM	5489	H	SER	174	26.642	30.232	76.586	1.00	0.00	E
ATOM	5490	CA	SER	174	24.919	31.327	76.037	1.00	2.30	E
ATOM	5491	CB	SER	174	25.256	32.411	75.028	1.00	2.01	E
ATOM	5492	OG	SER	174	24.556	33.580	75.339	1.00	2.01	E
ATOM	5493	HG	SER	174	23.622	33.383	75.357	1.00	0.00	E
ATOM	5494	C	SER	174	24.537	30.008	75.335	1.00	2.30	E
ATOM	5495	O	SER	174	25.399	29.189	75.021	1.00	2.01	E
ATOM	5496	N	LEU	175	23.261	29.802	75.091	1.00	2.48	E
ATOM	5497	H	LEU	175	22.607	30.484	75.337	1.00	0.00	E
ATOM	5498	CA	LEU	175	22.834	28.580	74.470	1.00	2.48	E
ATOM	5499	CB	LEU	175	22.447	27.559	75.562	1.00	8.45	E
ATOM	5500	CG	LEU	175	21.373	26.448	75.548	1.00	8.45	E
ATOM	5501	CD1	LEU	175	20.258	26.684	74.600	1.00	8.45	E
ATOM	5502	CD2	LEU	175	22.006	25.200	75.234	1.00	8.45	E
ATOM	5503	C	LEU	175	21.669	28.801	73.505	1.00	2.48	E
ATOM	5504	O	LEU	175	20.703	29.492	73.824	1.00	8.45	E
ATOM	5505	N	SER	176	21.785	28.173	72.339	1.00	3.33	E
ATOM	5506	H	SER	176	22.594	27.648	72.186	1.00	0.00	E
ATOM	5507	CA	SER	176	20.800	28.222	71.300	1.00	3.33	E
ATOM	5508	CB	SER	176	21.492	28.400	69.972	1.00	17.00	E
ATOM	5509	OG	SER	176	20.929	29.456	69.240	1.00	17.00	E
ATOM	5510	HG	SER	176	19.991	29.496	69.417	1.00	0.00	E
ATOM	5511	C	SER	176	20.067	26.880	71.250	1.00	3.33	E
ATOM	5512	O	SER	176	20.697	25.826	71.349	1.00	17.00	E
ATOM	5513	N	SER	177	18.745	26.885	71.122	1.00	13.48	E
ATOM	5514	H	SER	177	18.251	27.726	71.126	1.00	0.00	E
ATOM	5515	CA	SER	177	18.054	25.615	70.983	1.00	13.48	E
ATOM	5516	CB	SER	177	17.338	25.219	72.260	1.00	15.43	E
ATOM	5517	OG	SER	177	17.009	23.837	72.187	1.00	15.43	E
ATOM	5518	HG	SER	177	16.349	23.658	72.873	1.00	0.00	E
ATOM	5519	C	SER	177	17.072	25.732	69.830	1.00	13.48	E
ATOM	5520	O	SER	177	16.206	26.593	69.830	1.00	15.43	E
ATOM	5521	N	THR	178	17.236	24.869	68.832	1.00	2.31	E
ATOM	5522	H	THR	178	17.948	24.210	68.897	1.00	0.00	E
ATOM	5523	CA	THR	178	16.379	24.891	67.653	1.00	2.31	E
ATOM	5524	CB	THR	178	17.170	24.971	66.365	1.00	14.10	E
ATOM	5525	OG1	THR	178	18.064	26.097	66.428	1.00	14.10	E
ATOM	5526	HG1	THR	178	17.587	26.880	66.688	1.00	0.00	E
ATOM	5527	CG2	THR	178	16.243	25.100	65.186	1.00	14.10	E
ATOM	5528	C	THR	178	15.497	23.727	67.514	1.00	2.31	E
ATOM	5529	O	THR	178	15.961	22.630	67.457	1.00	14.10	E
ATOM	5530	N	LEU	179	14.205	23.989	67.440	1.00	2.00	E
ATOM	5531	H	LEU	179	13.925	24.924	67.496	1.00	0.00	E
ATOM	5532	CA	LEU	179	13.190	22.962	67.281	1.00	2.00	E
ATOM	5533	CB	LEU	179	11.999	23.280	68.190	1.00	7.84	E
ATOM	5534	CG	LEU	179	10.774	22.370	68.019	1.00	7.84	E
ATOM	5535	CD1	LEU	179	10.996	21.096	68.813	1.00	7.84	E
ATOM	5536	CD2	LEU	179	9.519	23.067	68.478	1.00	7.84	E
ATOM	5537	C	LEU	179	12.776	22.994	65.821	1.00	2.00	E
ATOM	5538	O	LEU	179	12.090	23.856	65.436	1.00	7.84	E
ATOM	5539	N	THR	180	13.237	22.049	65.021	1.00	12.73	E
ATOM	5540	H	THR	180	13.810	21.352	65.400	1.00	0.00	E
ATOM	5541	CA	THR	180	12.933	21.989	63.593	1.00	12.73	E



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ATOM	5542	CB	THR	180	14.115	21.428	62.829	1.00	23.25	E
ATOM	5543	OG1	THR	180	15.313	22.118	63.233	1.00	23.25	E
ATOM	5544	HG1	THR	180	15.949	21.485	63.573	1.00	0.00	E
ATOM	5545	CG2	THR	180	13.897	21.587	61.351	1.00	23.25	E
ATOM	5546	C	THR	180	11.731	21.132	63.277	1.00	12.73	E
ATOM	5547	O	THR	180	11.722	19.944	63.541	1.00	23.25	E
ATOM	5548	N	LEU	181	10.715	21.741	62.695	1.00	9.14	E
ATOM	5549	H	LEU	181	10.771	22.659	62.472	1.00	0.00	E
ATOM	5550	CA	LEU	181	9.525	21.001	62.394	1.00	9.14	E
ATOM	5551	CB	LEU	181	8.373	21.581	63.185	1.00	9.99	E
ATOM	5552	CG	LEU	181	8.354	21.326	64.683	1.00	9.99	E
ATOM	5553	CD1	LEU	181	7.704	22.427	65.409	1.00	9.99	E
ATOM	5554	CD2	LEU	181	7.568	20.122	64.913	1.00	9.99	E
ATOM	5555	C	LEU	181	9.178	21.073	60.920	1.00	9.14	E
ATOM	5556	O	LEU	181	9.682	21.958	60.199	1.00	9.99	E
ATOM	5557	N	SER	182	8.348	20.136	60.452	1.00	13.49	E
ATOM	5558	H	SER	182	8.056	19.411	61.043	1.00	0.00	E
ATOM	5559	CA	SER	182	7.879	20.181	59.076	1.00	13.49	E
ATOM	5560	CB	SER	182	7.082	18.926	58.730	1.00	21.73	E
ATOM	5561	OG	SER	182	5.730	19.052	59.149	1.00	21.73	E
ATOM	5562	HG	SER	182	5.146	19.093	58.392	1.00	0.00	E
ATOM	5563	C	SER	182	6.914	21.394	59.059	1.00	13.49	E
ATOM	5564	O	SER	182	6.314	21.740	60.080	1.00	21.73	E
ATOM	5565	N	LYS	183	6.772	22.025	57.901	1.00	20.60	E
ATOM	5566	H	LYS	183	7.271	21.703	57.121	1.00	0.00	E
ATOM	5567	CA	LYS	183	5.903	23.164	57.775	1.00	20.60	E
ATOM	5568	CB	LYS	183	5.998	23.711	56.350	1.00	37.92	E
ATOM	5569	CG	LYS	183	5.533	25.173	56.171	1.00	37.92	E
ATOM	5570	CD	LYS	183	5.007	25.411	54.755	1.00	37.92	E
ATOM	5571	CE	LYS	183	3.999	26.555	54.678	1.00	37.92	E
ATOM	5572	NZ	LYS	183	4.584	27.810	54.120	1.00	37.92	E
ATOM	5573	HZ1	LYS	183	3.904	28.240	53.456	1.00	0.00	E
ATOM	5574	HZ2	LYS	183	5.467	27.596	53.624	1.00	0.00	E
ATOM	5575	HZ3	LYS	183	4.774	28.484	54.895	1.00	0.00	E
ATOM	5576	C	LYS	183	4.455	22.777	58.089	1.00	20.60	E
ATOM	5577	O	LYS	183	3.584	23.628	58.299	1.00	37.92	E
ATOM	5578	N	ALA	184	4.200	21.482	58.160	1.00	21.72	E
ATOM	5579	H	ALA	184	4.923	20.829	58.065	1.00	0.00	E
ATOM	5580	CA	ALA	184	2.847	21.031	58.382	1.00	21.72	E
ATOM	5581	CB	ALA	184	2.529	19.893	57.445	1.00	24.25	E
ATOM	5582	C	ALA	184	2.550	20.640	59.791	1.00	21.72	E
ATOM	5583	O	ALA	184	1.386	20.485	60.140	1.00	24.25	E
ATOM	5584	N	ASP	185	3.577	20.438	60.604	1.00	29.79	E
ATOM	5585	H	ASP	185	4.495	20.486	60.266	1.00	0.00	E
ATOM	5586	CA	ASP	185	3.303	20.129	62.009	1.00	29.79	E
ATOM	5587	CB	ASP	185	4.506	19.464	62.700	1.00	42.17	E
ATOM	5588	CG	ASP	185	4.576	17.953	62.498	1.00	42.17	E
ATOM	5589	OD1	ASP	185	3.590	17.310	62.053	1.00	42.17	E
ATOM	5590	OD2	ASP	185	5.670	17.413	62.793	1.00	42.17	E
ATOM	5591	C	ASP	185	3.106	21.515	62.632	1.00	29.79	E
ATOM	5592	O	ASP	185	2.267	21.720	63.534	1.00	42.17	E
ATOM	5593	N	TYR	186	3.912	22.457	62.140	1.00	21.97	E
ATOM	5594	H	TYR	186	4.544	22.218	61.427	1.00	0.00	E
ATOM	5595	CA	TYR	186	3.884	23.833	62.623	1.00	21.97	E
ATOM	5596	CB	TYR	186	5.018	24.664	62.004	1.00	9.37	E
ATOM	5597	CG	TYR	186	5.166	25.970	62.705	1.00	9.37	E

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ATOM	5598	CD1 TYR	186	5.448	26.012	64.053	1.00	9.37	E
ATOM	5599	CE1 TYR	186	5.460	27.187	64.734	1.00	9.37	E
ATOM	5600	CD2 TYR	186	4.907	27.163	62.047	1.00	9.37	E
ATOM	5601	CE2 TYR	186	4.918	28.364	62.739	1.00	9.37	E
ATOM	5602	CZ TYR	186	5.191	28.356	64.087	1.00	9.37	E
ATOM	5603	OH TYR	186	5.130	29.521	64.804	1.00	9.37	E
ATOM	5604	HH TYR	186	5.886	30.065	64.577	1.00	0.00	E
ATOM	5605	C TYR	186	2.549	24.459	62.292	1.00	21.97	E
ATOM	5606	O TYR	186	2.052	25.322	63.014	1.00	9.37	E
ATOM	5607	N GLU	187	1.985	24.008	61.177	1.00	17.96	E
ATOM	5608	H GLU	187	2.474	23.351	60.633	1.00	0.00	E
ATOM	5609	CA GLU	187	0.678	24.453	60.717	1.00	17.96	E
ATOM	5610	CB GLU	187	0.477	23.937	59.288	1.00	47.36	E
ATOM	5611	CG GLU	187	-0.905	24.149	58.703	1.00	47.36	E
ATOM	5612	CD GLU	187	-1.630	22.840	58.282	1.00	47.36	E
ATOM	5613	OE1 GLU	187	-2.897	22.876	58.168	1.00	47.36	E
ATOM	5614	OE2 GLU	187	-0.952	21.796	58.068	1.00	47.36	E
ATOM	5615	C GLU	187	-0.330	23.797	61.702	1.00	17.96	E
ATOM	5616	O GLU	187	-1.379	24.366	62.010	1.00	47.36	E
ATOM	5617	N LYS	188	0.061	22.623	62.225	1.00	28.88	E
ATOM	5618	H LYS	188	0.954	22.307	61.968	1.00	0.00	E
ATOM	5619	CA LYS	188	-0.717	21.763	63.152	1.00	28.88	E
ATOM	5620	CB LYS	188	-0.134	20.345	63.117	1.00	43.96	E
ATOM	5621	CG LYS	188	-1.109	19.244	62.707	1.00	43.96	E
ATOM	5622	CD LYS	188	-0.624	18.503	61.452	1.00	43.96	E
ATOM	5623	CE LYS	188	0.188	17.230	61.783	1.00	43.96	E
ATOM	5624	NZ LYS	188	0.781	17.177	63.175	1.00	43.96	E
ATOM	5625	HZ1 LYS	188	1.361	18.035	63.294	1.00	0.00	E
ATOM	5626	HZ2 LYS	188	1.408	16.347	63.235	1.00	0.00	E
ATOM	5627	HZ3 LYS	188	0.056	17.116	63.919	1.00	0.00	E
ATOM	5628	C LYS	188	-0.822	22.145	64.616	1.00	28.88	E
ATOM	5629	O LYS	188	-1.431	21.422	65.395	1.00	43.96	E
ATOM	5630	N HIS	189	-0.218	23.249	65.010	1.00	4.34	E
ATOM	5631	H HIS	189	0.265	23.812	64.377	1.00	0.00	E
ATOM	5632	CA HIS	189	-0.272	23.625	66.406	1.00	4.34	E
ATOM	5633	CB HIS	189	0.852	22.935	67.159	1.00	14.87	E
ATOM	5634	CG HIS	189	0.863	21.464	66.968	1.00	14.87	E
ATOM	5635	CD2 HIS	189	1.700	20.657	66.275	1.00	14.87	E
ATOM	5636	ND1 HIS	189	-0.084	20.650	67.536	1.00	14.87	E
ATOM	5637	HD1 HIS	189	-0.837	20.941	68.083	1.00	0.00	E
ATOM	5638	CE1 HIS	189	0.175	19.394	67.210	1.00	14.87	E
ATOM	5639	NE2 HIS	189	1.254	19.369	66.448	1.00	14.87	E
ATOM	5640	HE2 HIS	189	1.656	18.547	66.091	1.00	0.00	E
ATOM	5641	C HIS	189	-0.264	25.092	66.726	1.00	4.34	E
ATOM	5642	O HIS	189	0.271	25.903	65.993	1.00	14.87	E
ATOM	5643	N LYS	190	-0.874	25.394	67.859	1.00	8.07	E
ATOM	5644	H LYS	190	-1.235	24.646	68.397	1.00	0.00	E
ATOM	5645	CA LYS	190	-1.067	26.746	68.359	1.00	8.07	E
ATOM	5646	CB LYS	190	-2.332	26.796	69.226	1.00	26.92	E
ATOM	5647	CG LYS	190	-2.512	28.047	70.015	1.00	26.92	E
ATOM	5648	CD LYS	190	-3.279	29.067	69.202	1.00	26.92	E
ATOM	5649	CE LYS	190	-2.349	30.084	68.517	1.00	26.92	E
ATOM	5650	NZ LYS	190	-3.110	31.033	67.627	1.00	26.92	E
ATOM	5651	HZ1 LYS	190	-4.110	30.752	67.607	1.00	0.00	E
ATOM	5652	HZ2 LYS	190	-2.716	30.984	66.665	1.00	0.00	E
ATOM	5653	HZ3 LYS	190	-3.018	32.000	67.997	1.00	0.00	E

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ATOM	5654	C	LYS	190	0.097	27.279	69.151	1.00	8.07	E
ATOM	5655	O	LYS	190	0.784	28.206	68.698	1.00	26.92	E
ATOM	5656	N	VAL	191	0.341	26.687	70.316	1.00	2.00	E
ATOM	5657	H	VAL	191	-0.192	25.923	70.600	1.00	0.00	E
ATOM	5658	CA	VAL	191	1.399	27.185	71.162	1.00	2.00	E
ATOM	5659	CB	VAL	191	0.825	27.537	72.592	1.00	19.12	E
ATOM	5660	CG1	VAL	191	-0.663	27.206	72.646	1.00	19.12	E
ATOM	5661	CG2	VAL	191	1.587	26.850	73.680	1.00	19.12	E
ATOM	5662	C	VAL	191	2.707	26.434	71.260	1.00	2.00	E
ATOM	5663	O	VAL	191	2.742	25.243	71.561	1.00	19.12	E
ATOM	5664	N	TYR	192	3.778	27.196	71.002	1.00	20.71	E
ATOM	5665	H	TYR	192	3.601	28.134	70.779	1.00	0.00	E
ATOM	5666	CA	TYR	192	5.170	26.759	71.023	1.00	20.71	E
ATOM	5667	CB	TYR	192	5.848	27.212	69.736	1.00	16.83	E
ATOM	5668	CG	TYR	192	5.372	26.364	68.597	1.00	16.83	E
ATOM	5669	CD1	TYR	192	5.901	25.076	68.386	1.00	16.83	E
ATOM	5670	CE1	TYR	192	5.343	24.236	67.441	1.00	16.83	E
ATOM	5671	CD2	TYR	192	4.274	26.775	67.818	1.00	16.83	E
ATOM	5672	CE2	TYR	192	3.713	25.941	66.877	1.00	16.83	E
ATOM	5673	CZ	TYR	192	4.242	24.680	66.687	1.00	16.83	E
ATOM	5674	OH	TYR	192	3.670	23.878	65.726	1.00	16.83	E
ATOM	5675	HH	TYR	192	3.136	24.411	65.136	1.00	0.00	E
ATOM	5676	C	TYR	192	5.864	27.362	72.226	1.00	20.71	E
ATOM	5677	O	TYR	192	5.899	28.590	72.353	1.00	16.83	E
ATOM	5678	N	ALA	193	6.424	26.515	73.098	1.00	2.00	E
ATOM	5679	H	ALA	193	6.405	25.557	72.924	1.00	0.00	E
ATOM	5680	CA	ALA	193	7.062	27.017	74.296	1.00	2.00	E
ATOM	5681	CB	ALA	193	6.217	26.733	75.493	1.00	10.47	E
ATOM	5682	C	ALA	193	8.450	26.526	74.565	1.00	2.00	E
ATOM	5683	O	ALA	193	8.801	25.399	74.261	1.00	10.47	E
ATOM	5684	N	CYS	194	9.202	27.389	75.233	1.00	7.63	E
ATOM	5685	H	CYS	194	8.815	28.236	75.477	1.00	0.00	E
ATOM	5686	CA	CYS	194	10.555	27.107	75.632	1.00	7.63	E
ATOM	5687	C	CYS	194	10.666	27.087	77.201	1.00	7.63	E
ATOM	5688	O	CYS	194	10.652	28.094	77.874	1.00	4.45	E
ATOM	5689	CB	CYS	194	11.496	28.170	74.998	1.00	4.45	E
ATOM	5690	SG	CYS	194	13.194	27.640	75.257	1.00	4.45	E
ATOM	5691	N	GLU	195	10.776	25.919	77.784	1.00	4.53	E
ATOM	5692	H	GLU	195	10.774	25.096	77.266	1.00	0.00	E
ATOM	5693	CA	GLU	195	10.902	25.863	79.226	1.00	4.53	E
ATOM	5694	CB	GLU	195	10.145	24.700	79.801	1.00	20.87	E
ATOM	5695	CG	GLU	195	10.033	24.857	81.283	1.00	20.87	E
ATOM	5696	CD	GLU	195	9.269	23.747	81.938	1.00	20.87	E
ATOM	5697	OE1	GLU	195	9.774	22.614	81.899	1.00	20.87	E
ATOM	5698	OE2	GLU	195	8.172	24.010	82.489	1.00	20.87	E
ATOM	5699	C	GLU	195	12.348	25.695	79.606	1.00	4.53	E
ATOM	5700	O	GLU	195	13.044	24.835	79.033	1.00	20.87	E
ATOM	5701	N	VAL	196	12.819	26.516	80.560	1.00	3.79	E
ATOM	5702	H	VAL	196	12.231	27.183	80.972	1.00	0.00	E
ATOM	5703	CA	VAL	196	14.202	26.413	80.970	1.00	3.79	E
ATOM	5704	CB	VAL	196	15.094	27.442	80.282	1.00	9.01	E
ATOM	5705	CG1	VAL	196	14.256	28.428	79.502	1.00	9.01	E
ATOM	5706	CG2	VAL	196	16.036	28.069	81.326	1.00	9.01	E
ATOM	5707	C	VAL	196	14.525	26.389	82.421	1.00	3.79	E
ATOM	5708	O	VAL	196	13.955	27.105	83.192	1.00	9.01	E
ATOM	5709	N	THR	197	15.472	25.521	82.750	1.00	2.63	E

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ATOM	5710	H	THR	197	15.883	24.995	82.041	1.00	0.00	E
ATOM	5711	CA	THR	197	15.939	25.295	84.102	1.00	2.63	E
ATOM	5712	CB	THR	197	15.834	23.787	84.521	1.00	10.17	E
ATOM	5713	OG1	THR	197	14.460	23.402	84.623	1.00	10.17	E
ATOM	5714	HG1	THR	197	14.194	22.911	83.851	1.00	0.00	E
ATOM	5715	CG2	THR	197	16.480	23.558	85.875	1.00	10.17	E
ATOM	5716	C	THR	197	17.382	25.689	84.181	1.00	2.63	E
ATOM	5717	O	THR	197	18.140	25.386	83.283	1.00	10.17	E
ATOM	5718	N	HIS	198	17.735	26.350	85.274	1.00	7.86	E
ATOM	5719	H	HIS	198	17.043	26.528	85.945	1.00	0.00	E
ATOM	5720	CA	HIS	198	19.093	26.839	85.584	1.00	7.86	E
ATOM	5721	CB	HIS	198	19.486	28.011	84.689	1.00	5.34	E
ATOM	5722	CG	HIS	198	20.886	28.465	84.885	1.00	5.34	E
ATOM	5723	CD2	HIS	198	22.007	28.225	84.176	1.00	5.34	E
ATOM	5724	ND1	HIS	198	21.248	29.335	85.882	1.00	5.34	E
ATOM	5725	HD1	HIS	198	20.666	29.704	86.579	1.00	0.00	E
ATOM	5726	CE1	HIS	198	22.533	29.620	85.775	1.00	5.34	E
ATOM	5727	NE2	HIS	198	23.015	28.960	84.745	1.00	5.34	E
ATOM	5728	HE2	HIS	198	23.928	29.011	84.414	1.00	0.00	E
ATOM	5729	C	HIS	198	19.011	27.307	87.018	1.00	7.86	E
ATOM	5730	O	HIS	198	17.972	27.835	87.433	1.00	5.34	E
ATOM	5731	N	GLN	199	20.098	27.111	87.762	1.00	2.00	E
ATOM	5732	H	GLN	199	20.914	26.742	87.352	1.00	0.00	E
ATOM	5733	CA	GLN	199	20.125	27.448	89.198	1.00	2.00	E
ATOM	5734	CB	GLN	199	21.380	26.961	89.878	1.00	12.95	E
ATOM	5735	CG	GLN	199	22.658	27.666	89.554	1.00	12.95	E
ATOM	5736	CD	GLN	199	23.862	26.801	89.930	1.00	12.95	E
ATOM	5737	OE1	GLN	199	24.428	27.000	91.002	1.00	12.95	E
ATOM	5738	NE2	GLN	199	24.246	25.833	89.062	1.00	12.95	E
ATOM	5739	HE21	GLN	199	25.020	25.279	89.288	1.00	0.00	E
ATOM	5740	HE22	GLN	199	23.721	25.731	88.242	1.00	0.00	E
ATOM	5741	C	GLN	199	19.960	28.841	89.563	1.00	2.00	E
ATOM	5742	O	GLN	199	19.856	29.131	90.727	1.00	12.95	E
ATOM	5743	N	GLY	200	19.935	29.710	88.569	1.00	11.43	E
ATOM	5744	H	GLY	200	20.040	29.395	87.648	1.00	0.00	E
ATOM	5745	CA	GLY	200	19.757	31.115	88.847	1.00	11.43	E
ATOM	5746	C	GLY	200	18.285	31.401	88.942	1.00	11.43	E
ATOM	5747	O	GLY	200	17.858	32.525	89.281	1.00	20.99	E
ATOM	5748	N	LEU	201	17.528	30.358	88.604	1.00	13.02	E
ATOM	5749	H	LEU	201	17.984	29.543	88.324	1.00	0.00	E
ATOM	5750	CA	LEU	201	16.087	30.374	88.608	1.00	13.02	E
ATOM	5751	CB	LEU	201	15.616	29.796	87.286	1.00	5.14	E
ATOM	5752	CG	LEU	201	15.366	30.714	86.082	1.00	5.14	E
ATOM	5753	CD1	LEU	201	16.037	32.070	86.183	1.00	5.14	E
ATOM	5754	CD2	LEU	201	15.824	29.910	84.855	1.00	5.14	E
ATOM	5755	C	LEU	201	15.509	29.586	89.831	1.00	13.02	E
ATOM	5756	O	LEU	201	16.096	28.617	90.283	1.00	5.14	E
ATOM	5757	N	SER	202	14.369	30.024	90.373	1.00	6.88	E
ATOM	5758	H	SER	202	13.922	30.799	89.981	1.00	0.00	E
ATOM	5759	CA	SER	202	13.782	29.366	91.516	1.00	6.88	E
ATOM	5760	CB	SER	202	12.727	30.233	92.142	1.00	17.09	E
ATOM	5761	OG	SER	202	13.307	31.040	93.105	1.00	17.09	E
ATOM	5762	HG	SER	202	13.811	30.484	93.705	1.00	0.00	E
ATOM	5763	C	SER	202	13.099	28.205	90.900	1.00	6.88	E
ATOM	5764	O	SER	202	13.137	27.067	91.370	1.00	17.09	E
ATOM	5765	N	SER	203	12.430	28.517	89.828	1.00	10.13	E

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ATOM	5766	H	SER	203	12.408	29.443	89.502	1.00	0.00	E
ATOM	5767	CA	SER	203	11.718	27.492	89.153	1.00	10.13	E
ATOM	5768	CB	SER	203	10.273	27.442	89.676	1.00	25.81	E
ATOM	5769	OG	SER	203	9.417	28.332	88.972	1.00	25.81	E
ATOM	5770	HG	SER	203	9.936	29.070	88.634	1.00	0.00	E
ATOM	5771	C	SER	203	11.769	27.884	87.711	1.00	10.13	E
ATOM	5772	O	SER	203	12.033	29.037	87.407	1.00	25.81	E
ATOM	5773	N	PRO	204	11.544	26.917	86.823	1.00	2.28	E
ATOM	5774	CD	PRO	204	11.364	25.533	87.276	1.00	2.00	E
ATOM	5775	CA	PRO	204	11.516	26.968	85.367	1.00	2.28	E
ATOM	5776	CB	PRO	204	10.729	25.728	84.998	1.00	2.00	E
ATOM	5777	CG	PRO	204	11.167	24.772	85.972	1.00	2.00	E
ATOM	5778	C	PRO	204	10.913	28.207	84.760	1.00	2.28	E
ATOM	5779	O	PRO	204	9.882	28.698	85.198	1.00	2.00	E
ATOM	5780	N	VAL	205	11.561	28.726	83.735	1.00	2.00	E
ATOM	5781	H	VAL	205	12.399	28.328	83.428	1.00	0.00	E
ATOM	5782	CA	VAL	205	11.038	29.892	83.065	1.00	2.00	E
ATOM	5783	CB	VAL	205	12.080	30.970	83.039	1.00	6.59	E
ATOM	5784	CG1	VAL	205	11.570	32.199	82.390	1.00	6.59	E
ATOM	5785	CG2	VAL	205	12.501	31.219	84.440	1.00	6.59	E
ATOM	5786	C	VAL	205	10.665	29.495	81.662	1.00	2.00	E
ATOM	5787	O	VAL	205	11.502	28.977	80.947	1.00	6.59	E
ATOM	5788	N	THR	206	9.414	29.689	81.256	1.00	25.81	E
ATOM	5789	H	THR	206	8.742	30.053	81.877	1.00	0.00	E
ATOM	5790	CA	THR	206	9.064	29.328	79.885	1.00	25.81	E
ATOM	5791	CB	THR	206	7.798	28.396	79.803	1.00	19.50	E
ATOM	5792	OG1	THR	206	6.669	29.075	80.300	1.00	19.50	E
ATOM	5793	HG1	THR	206	6.398	28.705	81.144	1.00	0.00	E
ATOM	5794	CG2	THR	206	7.938	27.200	80.633	1.00	19.50	E
ATOM	5795	C	THR	206	8.810	30.561	79.017	1.00	25.81	E
ATOM	5796	O	THR	206	8.297	31.554	79.498	1.00	19.50	E
ATOM	5797	N	LYS	207	9.227	30.553	77.761	1.00	12.05	E
ATOM	5798	H	LYS	207	9.770	29.817	77.414	1.00	0.00	E
ATOM	5799	CA	LYS	207	8.848	31.666	76.905	1.00	12.05	E
ATOM	5800	CB	LYS	207	10.055	32.384	76.333	1.00	4.19	E
ATOM	5801	CG	LYS	207	9.964	33.857	76.418	1.00	4.19	E
ATOM	5802	CD	LYS	207	10.584	34.378	77.642	1.00	4.19	E
ATOM	5803	CE	LYS	207	10.206	35.833	77.817	1.00	4.19	E
ATOM	5804	NZ	LYS	207	9.849	36.518	76.547	1.00	4.19	E
ATOM	5805	HZ1	LYS	207	8.972	36.138	76.163	1.00	0.00	E
ATOM	5806	HZ2	LYS	207	10.621	36.373	75.870	1.00	0.00	E
ATOM	5807	HZ3	LYS	207	9.738	37.543	76.717	1.00	0.00	E
ATOM	5808	C	LYS	207	8.067	30.962	75.802	1.00	12.05	E
ATOM	5809	O	LYS	207	8.425	29.815	75.415	1.00	4.19	E
ATOM	5810	N	SER	208	6.989	31.598	75.329	1.00	10.61	E
ATOM	5811	H	SER	208	6.740	32.470	75.695	1.00	0.00	E
ATOM	5812	CA	SER	208	6.185	30.994	74.268	1.00	10.61	E
ATOM	5813	CB	SER	208	5.128	30.100	74.868	1.00	22.93	E
ATOM	5814	OG	SER	208	4.708	30.605	76.113	1.00	22.93	E
ATOM	5815	HG	SER	208	3.826	30.289	76.291	1.00	0.00	E
ATOM	5816	C	SER	208	5.524	31.994	73.327	1.00	10.61	E
ATOM	5817	O	SER	208	5.453	33.210	73.609	1.00	22.93	E
ATOM	5818	N	PHE	209	5.050	31.474	72.202	1.00	10.31	E
ATOM	5819	H	PHE	209	5.154	30.509	72.051	1.00	0.00	E
ATOM	5820	CA	PHE	209	4.386	32.264	71.172	1.00	10.31	E
ATOM	5821	CB	PHE	209	5.354	32.691	70.069	1.00	12.07	E

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ATOM	5822	CG	PHE	209	5.749	31.596	69.147	1.00	12.07	E
ATOM	5823	CD1	PHE	209	7.056	31.151	69.122	1.00	12.07	E
ATOM	5824	CD2	PHE	209	4.829	31.022	68.305	1.00	12.07	E
ATOM	5825	CE1	PHE	209	7.436	30.163	68.281	1.00	12.07	E
ATOM	5826	CE2	PHE	209	5.202	30.007	67.436	1.00	12.07	E
ATOM	5827	CZ	PHE	209	6.493	29.573	67.415	1.00	12.07	E
ATOM	5828	C	PHE	209	3.244	31.492	70.556	1.00	10.31	E
ATOM	5829	O	PHE	209	3.352	30.308	70.313	1.00	12.07	E
ATOM	5830	N	ASN	210	2.150	32.189	70.299	1.00	19.08	E
ATOM	5831	H	ASN	210	2.112	33.145	70.498	1.00	0.00	E
ATOM	5832	CA	ASN	210	0.995	31.560	69.738	1.00	19.08	E
ATOM	5833	CB	ASN	210	-0.257	32.261	70.215	1.00	22.00	E
ATOM	5834	CG	ASN	210	-0.566	31.957	71.669	1.00	22.00	E
ATOM	5835	OD1	ASN	210	-1.091	32.807	72.400	1.00	22.00	E
ATOM	5836	ND2	ASN	210	-0.249	30.740	72.101	1.00	22.00	E
ATOM	5837	HD21	ASN	210	-0.249	30.005	71.447	1.00	0.00	E
ATOM	5838	HD22	ASN	210	-0.038	30.630	73.050	1.00	0.00	E
ATOM	5839	C	ASN	210	1.137	31.677	68.273	1.00	19.08	E
ATOM	5840	O	ASN	210	1.148	32.776	67.760	1.00	22.00	E
ATOM	5841	N	ARG	211	1.281	30.523	67.619	1.00	15.32	E
ATOM	5842	H	ARG	211	1.300	29.714	68.135	1.00	0.00	E
ATOM	5843	CA	ARG	211	1.423	30.454	66.181	1.00	15.32	E
ATOM	5844	CB	ARG	211	1.313	29.023	65.710	1.00	31.07	E
ATOM	5845	CG	ARG	211	2.205	28.744	64.519	1.00	31.07	E
ATOM	5846	CD	ARG	211	1.424	28.333	63.299	1.00	31.07	E
ATOM	5847	NE	ARG	211	0.365	27.415	63.655	1.00	31.07	E
ATOM	5848	HE	ARG	211	0.565	26.712	64.302	1.00	0.00	E
ATOM	5849	CZ	ARG	211	-0.851	27.471	63.148	1.00	31.07	E
ATOM	5850	NH1	ARG	211	-1.153	28.405	62.265	1.00	31.07	E
ATOM	5851	HH11	ARG	211	-2.101	28.476	61.946	1.00	0.00	E
ATOM	5852	HH12	ARG	211	-0.497	29.125	62.055	1.00	0.00	E
ATOM	5853	NH2	ARG	211	-1.765	26.600	63.542	1.00	31.07	E
ATOM	5854	HH21	ARG	211	-1.715	26.233	64.470	1.00	0.00	E
ATOM	5855	HH22	ARG	211	-2.336	26.135	62.864	1.00	0.00	E
ATOM	5856	C	ARG	211	0.387	31.300	65.474	1.00	15.32	E
ATOM	5857	O	ARG	211	-0.668	31.569	66.076	1.00	31.07	E
ATOM	5858	OT	ARG	211	0.647	31.706	64.332	1.00	31.07	E
ATOM	5859	CB	GLN	1	49.417	46.357	60.733	1.00	58.48	B
ATOM	5860	CG	GLN	1	48.691	44.994	60.560	1.00	58.48	B
ATOM	5861	CD	GLN	1	47.409	44.844	61.415	1.00	58.48	B
ATOM	5862	OE1	GLN	1	47.474	44.612	62.641	1.00	58.48	B
ATOM	5863	NE2	GLN	1	46.242	44.967	60.763	1.00	58.48	B
ATOM	5864	HE21	GLN	1	45.635	44.186	60.774	1.00	0.00	B
ATOM	5865	HE22	GLN	1	46.036	45.802	60.303	1.00	0.00	B
ATOM	5866	C	GLN	1	51.373	45.063	59.758	1.00	20.31	B
ATOM	5867	O	GLN	1	51.199	45.010	58.532	1.00	58.48	B
ATOM	5868	HT1	GLN	1	52.451	47.526	59.758	1.00	0.00	B
ATOM	5869	HT2	GLN	1	51.293	48.384	60.654	1.00	0.00	B
ATOM	5870	N	GLN	1	51.436	47.604	59.984	1.00	20.31	B
ATOM	5871	HT3	GLN	1	50.909	47.795	59.112	1.00	0.00	B
ATOM	5872	CA	GLN	1	50.957	46.315	60.577	1.00	20.31	B
ATOM	5873	N	VAL	2	51.906	44.051	60.444	1.00	17.69	B
ATOM	5874	H	VAL	2	52.047	44.156	61.415	1.00	0.00	B
ATOM	5875	CA	VAL	2	52.273	42.801	59.778	1.00	17.69	B
ATOM	5876	CB	VAL	2	53.320	42.010	60.576	1.00	7.51	B
ATOM	5877	CG1	VAL	2	53.265	40.555	60.178	1.00	7.51	B

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ATOM	5878	CG2 VAL	2	54.755	42.622	60.318	1.00	7.51	B
ATOM	5879	C VAL	2	51.025	41.918	59.596	1.00	17.69	B
ATOM	5880	O VAL	2	50.305	41.593	60.553	1.00	7.51	B
ATOM	5881	N GLN	3	50.739	41.544	58.359	1.00	24.60	B
ATOM	5882	H GLN	3	51.302	41.818	57.609	1.00	0.00	B
ATOM	5883	CA GLN	3	49.566	40.729	58.133	1.00	24.60	B
ATOM	5884	CB GLN	3	48.481	41.543	57.442	1.00	43.98	B
ATOM	5885	CG GLN	3	47.122	41.014	57.705	1.00	43.98	B
ATOM	5886	CD GLN	3	46.144	42.117	57.993	1.00	43.98	B
ATOM	5887	OE1 GLN	3	46.016	42.569	59.138	1.00	43.98	B
ATOM	5888	NE2 GLN	3	45.445	42.574	56.951	1.00	43.98	B
ATOM	5889	HE21 GLN	3	45.586	43.502	56.673	1.00	0.00	B
ATOM	5890	HE22 GLN	3	44.821	41.966	56.507	1.00	0.00	B
ATOM	5891	C GLN	3	49.805	39.455	57.338	1.00	24.60	B
ATOM	5892	O GLN	3	50.508	39.449	56.322	1.00	43.98	B
ATOM	5893	N LEU	4	49.199	38.379	57.816	1.00	10.71	B
ATOM	5894	H LEU	4	48.677	38.442	58.640	1.00	0.00	B
ATOM	5895	CA LEU	4	49.297	37.124	57.144	1.00	10.71	B
ATOM	5896	CB LEU	4	50.001	36.111	58.037	1.00	18.74	B
ATOM	5897	CG LEU	4	51.519	36.246	58.108	1.00	18.74	B
ATOM	5898	CD1 LEU	4	52.054	35.012	58.784	1.00	18.74	B
ATOM	5899	CD2 LEU	4	52.124	36.435	56.721	1.00	18.74	B
ATOM	5900	C LEU	4	47.865	36.687	56.832	1.00	10.71	B
ATOM	5901	O LEU	4	47.091	36.427	57.735	1.00	18.74	B
ATOM	5902	N VAL	5	47.524	36.600	55.553	1.00	2.66	B
ATOM	5903	H VAL	5	48.184	36.782	54.859	1.00	0.00	B
ATOM	5904	CA VAL	5	46.178	36.238	55.175	1.00	2.66	B
ATOM	5905	CB VAL	5	45.481	37.430	54.500	1.00	14.58	B
ATOM	5906	CG1 VAL	5	44.267	36.967	53.678	1.00	14.58	B
ATOM	5907	CG2 VAL	5	45.066	38.396	55.575	1.00	14.58	B
ATOM	5908	C VAL	5	45.985	35.018	54.304	1.00	2.66	B
ATOM	5909	O VAL	5	46.116	35.117	53.092	1.00	14.58	B
ATOM	5910	N GLN	6	45.615	33.896	54.911	1.00	2.00	B
ATOM	5911	H GLN	6	45.469	33.907	55.866	1.00	0.00	B
ATOM	5912	CA GLN	6	45.407	32.627	54.175	1.00	2.00	B
ATOM	5913	CB GLN	6	45.561	31.435	55.104	1.00	9.88	B
ATOM	5914	CG GLN	6	46.735	31.511	55.994	1.00	9.88	B
ATOM	5915	CD GLN	6	46.705	30.404	56.952	1.00	9.88	B
ATOM	5916	OE1 GLN	6	46.925	30.583	58.165	1.00	9.88	B
ATOM	5917	NE2 GLN	6	46.401	29.221	56.444	1.00	9.88	B
ATOM	5918	HE21 GLN	6	47.099	28.726	55.969	1.00	0.00	B
ATOM	5919	HE22 GLN	6	45.487	28.897	56.573	1.00	0.00	B
ATOM	5920	C GLN	6	44.108	32.400	53.400	1.00	2.00	B
ATOM	5921	O GLN	6	43.039	32.998	53.652	1.00	9.88	B
ATOM	5922	N SER	7	44.236	31.483	52.459	1.00	16.61	B
ATOM	5923	H SER	7	45.103	31.061	52.332	1.00	0.00	B
ATOM	5924	CA SER	7	43.138	31.072	51.603	1.00	16.61	B
ATOM	5925	CB SER	7	43.662	30.049	50.598	1.00	23.30	B
ATOM	5926	OG SER	7	44.327	28.972	51.260	1.00	23.30	B
ATOM	5927	HG SER	7	44.455	29.199	52.182	1.00	0.00	B
ATOM	5928	C SER	7	41.950	30.459	52.382	1.00	16.61	B
ATOM	5929	O SER	7	42.091	30.033	53.530	1.00	23.30	B
ATOM	5930	N GLY	8	40.794	30.408	51.705	1.00	11.92	B
ATOM	5931	H GLY	8	40.775	30.742	50.785	1.00	0.00	B
ATOM	5932	CA GLY	8	39.575	29.858	52.268	1.00	11.92	B
ATOM	5933	C GLY	8	39.559	28.334	52.457	1.00	11.92	B

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ATOM	5934	O	GLY	8	40.299	27.593	51.780	1.00	17.67	B
ATOM	5935	N	ALA	9	38.696	27.887	53.384	1.00	17.63	B
ATOM	5936	H	ALA	9	38.148	28.553	53.837	1.00	0.00	B
ATOM	5937	CA	ALA	9	38.517	26.485	53.760	1.00	17.63	B
ATOM	5938	CB	ALA	9	37.621	26.395	54.946	1.00	25.59	B
ATOM	5939	C	ALA	9	37.940	25.672	52.618	1.00	17.63	B
ATOM	5940	O	ALA	9	36.899	26.026	52.079	1.00	25.59	B
ATOM	5941	N	GLU	10	38.611	24.568	52.280	1.00	24.90	B
ATOM	5942	H	GLU	10	39.397	24.322	52.808	1.00	0.00	B
ATOM	5943	CA	GLU	10	38.219	23.707	51.170	1.00	24.90	B
ATOM	5944	CB	GLU	10	39.394	23.627	50.175	1.00	29.71	B
ATOM	5945	CG	GLU	10	39.322	24.574	48.996	1.00	29.71	B
ATOM	5946	CD	GLU	10	40.526	25.531	48.883	1.00	29.71	B
ATOM	5947	OE1	GLU	10	41.654	25.100	48.517	1.00	29.71	B
ATOM	5948	OE2	GLU	10	40.336	26.742	49.153	1.00	29.71	B
ATOM	5949	C	GLU	10	37.858	22.289	51.629	1.00	24.90	B
ATOM	5950	O	GLU	10	38.400	21.805	52.620	1.00	29.71	B
ATOM	5951	N	VAL	11	36.934	21.640	50.919	1.00	23.36	B
ATOM	5952	H	VAL	11	36.491	22.112	50.179	1.00	0.00	B
ATOM	5953	CA	VAL	11	36.588	20.235	51.206	1.00	23.36	B
ATOM	5954	CB	VAL	11	35.184	19.873	50.860	1.00	13.63	B
ATOM	5955	CG1	VAL	11	34.600	19.116	51.971	1.00	13.63	B
ATOM	5956	CG2	VAL	11	34.389	21.072	50.534	1.00	13.63	B
ATOM	5957	C	VAL	11	37.406	19.461	50.184	1.00	23.36	B
ATOM	5958	O	VAL	11	37.476	19.872	49.035	1.00	13.63	B
ATOM	5959	N	VAL	12	38.011	18.353	50.578	1.00	10.59	B
ATOM	5960	H	VAL	12	37.903	18.050	51.513	1.00	0.00	B
ATOM	5961	CA	VAL	12	38.826	17.566	49.663	1.00	10.59	B
ATOM	5962	CB	VAL	12	40.326	17.689	49.941	1.00	26.75	B
ATOM	5963	CG1	VAL	12	41.099	17.197	48.741	1.00	26.75	B
ATOM	5964	CG2	VAL	12	40.683	19.104	50.247	1.00	26.75	B
ATOM	5965	C	VAL	12	38.470	16.131	49.868	1.00	10.59	B
ATOM	5966	O	VAL	12	38.227	15.712	51.006	1.00	26.75	B
ATOM	5967	N	LYS	13	38.464	15.369	48.780	1.00	14.96	B
ATOM	5968	H	LYS	13	38.684	15.768	47.912	1.00	0.00	B
ATOM	5969	CA	LYS	13	38.120	13.951	48.862	1.00	14.96	B
ATOM	5970	CB	LYS	13	37.636	13.388	47.523	1.00	21.65	B
ATOM	5971	CG	LYS	13	37.414	14.413	46.417	1.00	21.65	B
ATOM	5972	CD	LYS	13	35.989	14.361	45.822	1.00	21.65	B
ATOM	5973	CE	LYS	13	35.649	15.662	45.019	1.00	21.65	B
ATOM	5974	NZ	LYS	13	36.070	15.656	43.560	1.00	21.65	B
ATOM	5975	HZ1	LYS	13	36.750	14.873	43.413	1.00	0.00	B
ATOM	5976	HZ2	LYS	13	36.519	16.548	43.286	1.00	0.00	B
ATOM	5977	HZ3	LYS	13	35.239	15.474	42.963	1.00	0.00	B
ATOM	5978	C	LYS	13	39.290	13.143	49.341	1.00	14.96	B
ATOM	5979	O	LYS	13	40.440	13.456	49.068	1.00	21.65	B
ATOM	5980	N	PRO	14	39.001	12.095	50.094	1.00	9.97	B
ATOM	5981	CD	PRO	14	37.664	11.644	50.494	1.00	20.25	B
ATOM	5982	CA	PRO	14	40.079	11.259	50.597	1.00	9.97	B
ATOM	5983	CB	PRO	14	39.377	10.086	51.263	1.00	20.25	B
ATOM	5984	CG	PRO	14	37.964	10.458	51.376	1.00	20.25	B
ATOM	5985	C	PRO	14	40.772	10.840	49.335	1.00	9.97	B
ATOM	5986	O	PRO	14	40.121	10.322	48.395	1.00	20.25	B
ATOM	5987	N	GLY	15	42.076	11.093	49.298	1.00	22.32	B
ATOM	5988	H	GLY	15	42.519	11.519	50.044	1.00	0.00	B
ATOM	5989	CA	GLY	15	42.858	10.744	48.131	1.00	22.32	B



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ATOM	5990	C	GLY	15	43.281	12.011	47.421	1.00	22.32	B
ATOM	5991	O	GLY	15	44.443	12.218	47.160	1.00	16.87	B
ATOM	5992	N	ALA	16	42.318	12.874	47.123	1.00	29.99	B
ATOM	5993	H	ALA	16	41.394	12.662	47.377	1.00	0.00	B
ATOM	5994	CA	ALA	16	42.590	14.124	46.437	1.00	29.99	B
ATOM	5995	CB	ALA	16	41.335	14.966	46.368	1.00	19.06	B
ATOM	5996	C	ALA	16	43.683	14.907	47.123	1.00	29.99	B
ATOM	5997	O	ALA	16	44.139	14.543	48.215	1.00	19.06	B
ATOM	5998	N	SER	17	44.065	16.005	46.474	1.00	3.06	B
ATOM	5999	H	SER	17	43.631	16.228	45.623	1.00	0.00	B
ATOM	6000	CA	SER	17	45.102	16.895	46.965	1.00	3.06	B
ATOM	6001	CB	SER	17	46.257	16.902	45.975	1.00	19.73	B
ATOM	6002	OG	SER	17	47.304	16.089	46.467	1.00	19.73	B
ATOM	6003	HG	SER	17	48.094	16.192	45.926	1.00	0.00	B
ATOM	6004	C	SER	17	44.610	18.338	47.194	1.00	3.06	B
ATOM	6005	O	SER	17	43.443	18.671	46.912	1.00	19.73	B
ATOM	6006	N	VAL	18	45.498	19.187	47.717	1.00	9.91	B
ATOM	6007	H	VAL	18	46.393	18.880	47.966	1.00	0.00	B
ATOM	6008	CA	VAL	18	45.140	20.577	47.922	1.00	9.91	B
ATOM	6009	CB	VAL	18	44.042	20.748	49.022	1.00	15.04	B
ATOM	6010	CG1	VAL	18	44.598	20.558	50.446	1.00	15.04	B
ATOM	6011	CG2	VAL	18	43.443	22.091	48.866	1.00	15.04	B
ATOM	6012	C	VAL	18	46.317	21.502	48.199	1.00	9.91	B
ATOM	6013	O	VAL	18	47.322	21.087	48.760	1.00	15.04	B
ATOM	6014	N	LYS	19	46.169	22.762	47.798	1.00	19.71	B
ATOM	6015	H	LYS	19	45.317	23.033	47.406	1.00	0.00	B
ATOM	6016	CA	LYS	19	47.204	23.778	47.935	1.00	19.71	B
ATOM	6017	CB	LYS	19	47.765	24.111	46.542	1.00	27.16	B
ATOM	6018	CG	LYS	19	48.808	25.236	46.490	1.00	27.16	B
ATOM	6019	CD	LYS	19	50.173	24.735	46.031	1.00	27.16	B
ATOM	6020	CE	LYS	19	50.440	25.007	44.549	1.00	27.16	B
ATOM	6021	NZ	LYS	19	49.874	26.317	44.049	1.00	27.16	B
ATOM	6022	HZ1	LYS	19	48.888	26.123	43.800	1.00	0.00	B
ATOM	6023	HZ2	LYS	19	50.391	26.633	43.208	1.00	0.00	B
ATOM	6024	HZ3	LYS	19	49.912	27.041	44.802	1.00	0.00	B
ATOM	6025	C	LYS	19	46.617	25.028	48.592	1.00	19.71	B
ATOM	6026	O	LYS	19	45.743	25.671	48.048	1.00	27.16	B
ATOM	6027	N	LEU	20	47.123	25.349	49.767	1.00	9.79	B
ATOM	6028	H	LEU	20	47.850	24.820	50.147	1.00	0.00	B
ATOM	6029	CA	LEU	20	46.632	26.459	50.509	1.00	9.79	B
ATOM	6030	CB	LEU	20	46.607	26.146	52.004	1.00	23.74	B
ATOM	6031	CG	LEU	20	45.731	25.098	52.616	1.00	23.74	B
ATOM	6032	CD1	LEU	20	44.912	24.350	51.587	1.00	23.74	B
ATOM	6033	CD2	LEU	20	46.657	24.204	53.328	1.00	23.74	B
ATOM	6034	C	LEU	20	47.563	27.616	50.358	1.00	9.79	B
ATOM	6035	O	LEU	20	48.767	27.429	50.430	1.00	23.74	B
ATOM	6036	N	SER	21	47.018	28.823	50.243	1.00	10.03	B
ATOM	6037	H	SER	21	46.050	28.954	50.218	1.00	0.00	B
ATOM	6038	CA	SER	21	47.872	29.962	50.142	1.00	10.03	B
ATOM	6039	CB	SER	21	47.427	30.798	48.946	1.00	10.56	B
ATOM	6040	OG	SER	21	46.449	31.758	49.306	1.00	10.56	B
ATOM	6041	HG	SER	21	46.446	32.495	48.700	1.00	0.00	B
ATOM	6042	C	SER	21	47.890	30.788	51.449	1.00	10.03	B
ATOM	6043	O	SER	21	46.954	30.722	52.263	1.00	10.56	B
ATOM	6044	N	CYS	22	48.972	31.556	51.613	1.00	11.79	B
ATOM	6045	H	CYS	22	49.664	31.532	50.911	1.00	0.00	B

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ATOM	6046	CA	CYS	22	49.207	32.424	52.739	1.00	11.79	B
ATOM	6047	C	CYS	22	49.902	33.681	52.210	1.00	11.79	B
ATOM	6048	O	CYS	22	51.112	33.681	51.975	1.00	12.77	B
ATOM	6049	CB	CYS	22	50.108	31.747	53.751	1.00	12.77	B
ATOM	6050	SG	CYS	22	50.646	32.889	55.067	1.00	12.77	B
ATOM	6051	N	LYS	23	49.121	34.757	52.063	1.00	10.10	B
ATOM	6052	H	LYS	23	48.178	34.672	52.302	1.00	0.00	B
ATOM	6053	CA	LYS	23	49.590	36.046	51.569	1.00	10.10	B
ATOM	6054	CB	LYS	23	48.465	36.766	50.857	1.00	15.28	B
ATOM	6055	CG	LYS	23	48.937	37.819	49.918	1.00	15.28	B
ATOM	6056	CD	LYS	23	48.224	39.140	50.105	1.00	15.28	B
ATOM	6057	CE	LYS	23	48.959	40.238	49.320	1.00	15.28	B
ATOM	6058	NZ	LYS	23	50.300	39.773	48.763	1.00	15.28	B
ATOM	6059	HZ1	LYS	23	50.154	38.965	48.126	1.00	0.00	B
ATOM	6060	HZ2	LYS	23	50.924	39.490	49.539	1.00	0.00	B
ATOM	6061	HZ3	LYS	23	50.757	40.541	48.225	1.00	0.00	B
ATOM	6062	C	LYS	23	50.159	36.936	52.638	1.00	10.10	B
ATOM	6063	O	LYS	23	49.508	37.244	53.624	1.00	15.28	B
ATOM	6064	N	ALA	24	51.387	37.365	52.393	1.00	2.00	B
ATOM	6065	H	ALA	24	51.805	37.109	51.558	1.00	0.00	B
ATOM	6066	CA	ALA	24	52.150	38.206	53.310	1.00	2.00	B
ATOM	6067	CB	ALA	24	53.612	37.699	53.389	1.00	6.12	B
ATOM	6068	C	ALA	24	52.144	39.707	53.000	1.00	2.00	B
ATOM	6069	O	ALA	24	51.982	40.123	51.858	1.00	6.12	B
ATOM	6070	N	SER	25	52.328	40.511	54.050	1.00	36.07	B
ATOM	6071	H	SER	25	52.443	40.113	54.943	1.00	0.00	B
ATOM	6072	CA	SER	25	52.393	41.966	53.913	1.00	36.07	B
ATOM	6073	CB	SER	25	51.056	42.502	53.448	1.00	16.99	B
ATOM	6074	OG	SER	25	50.009	41.892	54.143	1.00	16.99	B
ATOM	6075	HG	SER	25	49.390	42.581	54.402	1.00	0.00	B
ATOM	6076	C	SER	25	52.857	42.774	55.142	1.00	36.07	B
ATOM	6077	O	SER	25	52.661	42.373	56.293	1.00	16.99	B
ATOM	6078	N	GLY	26	53.482	43.916	54.876	1.00	2.00	B
ATOM	6079	H	GLY	26	53.643	44.195	53.941	1.00	0.00	B
ATOM	6080	CA	GLY	26	53.945	44.774	55.942	1.00	2.00	B
ATOM	6081	C	GLY	26	55.362	44.543	56.435	1.00	2.00	B
ATOM	6082	O	GLY	26	55.825	45.194	57.388	1.00	12.86	B
ATOM	6083	N	TYR	27	56.045	43.593	55.812	1.00	16.76	B
ATOM	6084	H	TYR	27	55.625	43.082	55.094	1.00	0.00	B
ATOM	6085	CA	TYR	27	57.395	43.320	56.184	1.00	16.76	B
ATOM	6086	CB	TYR	27	57.418	42.307	57.317	1.00	3.12	B
ATOM	6087	CG	TYR	27	57.132	40.925	56.933	1.00	3.12	B
ATOM	6088	CD1	TYR	27	55.848	40.403	57.017	1.00	3.12	B
ATOM	6089	CE1	TYR	27	55.586	39.033	56.753	1.00	3.12	B
ATOM	6090	CD2	TYR	27	58.148	40.082	56.574	1.00	3.12	B
ATOM	6091	CE2	TYR	27	57.923	38.735	56.311	1.00	3.12	B
ATOM	6092	CZ	TYR	27	56.633	38.207	56.403	1.00	3.12	B
ATOM	6093	OH	TYR	27	56.423	36.866	56.112	1.00	3.12	B
ATOM	6094	HH	TYR	27	56.884	36.313	56.758	1.00	0.00	B
ATOM	6095	C	TYR	27	58.081	42.836	54.909	1.00	16.76	B
ATOM	6096	O	TYR	27	57.425	42.764	53.879	1.00	3.12	B
ATOM	6097	N	ILE	28	59.394	42.570	54.937	1.00	8.17	B
ATOM	6098	H	ILE	28	59.886	42.684	55.771	1.00	0.00	B
ATOM	6099	CA	ILE	28	60.096	42.111	53.757	1.00	8.17	B
ATOM	6100	CB	ILE	28	61.638	42.239	53.867	1.00	12.53	B
ATOM	6101	CG2	ILE	28	62.270	41.555	52.690	1.00	12.53	B

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ATOM	6102	CG1 ILE	28	62.108	43.696	54.041	1.00	12.53	B
ATOM	6103	CD1 ILE	28	61.253	44.754	53.464	1.00	12.53	B
ATOM	6104	C ILE	28	59.803	40.642	53.750	1.00	8.17	B
ATOM	6105	O ILE	28	60.315	39.877	54.573	1.00	12.53	B
ATOM	6106	N PHE	29	58.971	40.238	52.815	1.00	12.13	B
ATOM	6107	H PHE	29	58.579	40.882	52.193	1.00	0.00	B
ATOM	6108	CA PHE	29	58.660	38.842	52.698	1.00	12.13	B
ATOM	6109	CB PHE	29	58.034	38.557	51.345	1.00	30.04	B
ATOM	6110	CG PHE	29	57.327	37.247	51.292	1.00	30.04	B
ATOM	6111	CD1 PHE	29	56.605	36.797	52.382	1.00	30.04	B
ATOM	6112	CD2 PHE	29	57.403	36.432	50.170	1.00	30.04	B
ATOM	6113	CE1 PHE	29	55.975	35.562	52.364	1.00	30.04	B
ATOM	6114	CE2 PHE	29	56.758	35.168	50.150	1.00	30.04	B
ATOM	6115	CZ PHE	29	56.049	34.742	51.246	1.00	30.04	B
ATOM	6116	C PHE	29	59.904	37.952	52.883	1.00	12.13	B
ATOM	6117	O PHE	29	59.905	37.053	53.727	1.00	30.04	B
ATOM	6118	N THR	30	60.961	38.208	52.114	1.00	24.64	B
ATOM	6119	H THR	30	60.919	38.968	51.492	1.00	0.00	B
ATOM	6120	CA THR	30	62.154	37.381	52.192	1.00	24.64	B
ATOM	6121	CB THR	30	63.069	37.558	50.955	1.00	12.46	B
ATOM	6122	OG1 THR	30	63.660	38.866	50.962	1.00	12.46	B
ATOM	6123	HG1 THR	30	63.747	39.187	51.868	1.00	0.00	B
ATOM	6124	CG2 THR	30	62.306	37.355	49.704	1.00	12.46	B
ATOM	6125	C THR	30	62.985	37.601	53.443	1.00	24.64	B
ATOM	6126	O THR	30	64.001	36.924	53.645	1.00	12.46	B
ATOM	6127	N SER	31	62.574	38.520	54.304	1.00	12.68	B
ATOM	6128	H SER	31	61.766	39.042	54.125	1.00	0.00	B
ATOM	6129	CA SER	31	63.381	38.705	55.507	1.00	12.68	B
ATOM	6130	CB SER	31	63.300	40.139	55.994	1.00	7.18	B
ATOM	6131	OG SER	31	63.920	40.993	55.079	1.00	7.18	B
ATOM	6132	HG SER	31	64.540	40.481	54.562	1.00	0.00	B
ATOM	6133	C SER	31	63.036	37.771	56.665	1.00	12.68	B
ATOM	6134	O SER	31	63.702	37.854	57.689	1.00	7.18	B
ATOM	6135	N TYR	32	62.018	36.904	56.495	1.00	13.18	B
ATOM	6136	H TYR	32	61.555	36.909	55.627	1.00	0.00	B
ATOM	6137	CA TYR	32	61.554	35.953	57.517	1.00	13.18	B
ATOM	6138	CB TYR	32	60.291	36.474	58.187	1.00	20.80	B
ATOM	6139	CG TYR	32	60.511	37.733	58.966	1.00	20.80	B
ATOM	6140	CD1 TYR	32	60.641	37.721	60.364	1.00	20.80	B
ATOM	6141	CE1 TYR	32	60.918	38.879	61.066	1.00	20.80	B
ATOM	6142	CD2 TYR	32	60.658	38.935	58.318	1.00	20.80	B
ATOM	6143	CE2 TYR	32	60.933	40.092	59.002	1.00	20.80	B
ATOM	6144	CZ TYR	32	61.067	40.069	60.360	1.00	20.80	B
ATOM	6145	OH TYR	32	61.402	41.248	60.996	1.00	20.80	B
ATOM	6146	HH TYR	32	60.680	41.525	61.566	1.00	0.00	B
ATOM	6147	C TYR	32	61.227	34.571	56.960	1.00	13.18	B
ATOM	6148	O TYR	32	60.899	34.439	55.798	1.00	20.80	B
ATOM	6149	N TYR	33	61.308	33.533	57.782	1.00	10.90	B
ATOM	6150	H TYR	33	61.615	33.674	58.703	1.00	0.00	B
ATOM	6151	CA TYR	33	60.936	32.206	57.298	1.00	10.90	B
ATOM	6152	CB TYR	33	61.644	31.090	58.064	1.00	39.83	B
ATOM	6153	CG TYR	33	63.049	30.801	57.603	1.00	39.83	B
ATOM	6154	CD1 TYR	33	63.993	31.825	57.506	1.00	39.83	B
ATOM	6155	CE1 TYR	33	65.296	31.569	57.100	1.00	39.83	B
ATOM	6156	CD2 TYR	33	63.451	29.507	57.281	1.00	39.83	B
ATOM	6157	CE2 TYR	33	64.763	29.244	56.871	1.00	39.83	B

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ATOM	6158	CZ	TYR	33	65.675	30.290	56.783	1.00	39.83	B
ATOM	6159	OH	TYR	33	66.964	30.090	56.360	1.00	39.83	B
ATOM	6160	HH	TYR	33	67.505	30.849	56.590	1.00	0.00	B
ATOM	6161	C	TYR	33	59.451	32.031	57.535	1.00	10.90	B
ATOM	6162	O	TYR	33	58.916	32.485	58.552	1.00	39.83	B
ATOM	6163	N	MET	34	58.764	31.381	56.604	1.00	27.75	B
ATOM	6164	H	MET	34	59.205	31.090	55.783	1.00	0.00	B
ATOM	6165	CA	MET	34	57.350	31.135	56.810	1.00	27.75	B
ATOM	6166	CB	MET	34	56.593	31.102	55.482	1.00	17.41	B
ATOM	6167	CG	MET	34	55.110	31.243	55.665	1.00	17.41	B
ATOM	6168	SD	MET	34	54.873	32.595	56.786	1.00	17.41	B
ATOM	6169	CE	MET	34	54.661	33.998	55.593	1.00	17.41	B
ATOM	6170	C	MET	34	57.233	29.774	57.494	1.00	27.75	B
ATOM	6171	O	MET	34	57.774	28.782	57.007	1.00	17.41	B
ATOM	6172	N	TYR	35	56.538	29.732	58.626	1.00	4.05	B
ATOM	6173	H	TYR	35	56.158	30.569	58.952	1.00	0.00	B
ATOM	6174	CA	TYR	35	56.328	28.498	59.363	1.00	4.05	B
ATOM	6175	CB	TYR	35	56.311	28.759	60.840	1.00	17.34	B
ATOM	6176	CG	TYR	35	57.638	28.649	61.497	1.00	17.34	B
ATOM	6177	CD1	TYR	35	58.624	27.863	60.961	1.00	17.34	B
ATOM	6178	CE1	TYR	35	59.819	27.706	61.613	1.00	17.34	B
ATOM	6179	CD2	TYR	35	57.886	29.288	62.697	1.00	17.34	B
ATOM	6180	CE2	TYR	35	59.066	29.143	63.347	1.00	17.34	B
ATOM	6181	CZ	TYR	35	60.035	28.348	62.807	1.00	17.34	B
ATOM	6182	OH	TYR	35	61.230	28.190	63.464	1.00	17.34	B
ATOM	6183	HH	TYR	35	61.097	27.649	64.246	1.00	0.00	B
ATOM	6184	C	TYR	35	54.945	28.006	59.002	1.00	4.05	B
ATOM	6185	O	TYR	35	54.079	28.814	58.711	1.00	17.34	B
ATOM	6186	N	TRP	36	54.741	26.686	59.020	1.00	24.26	B
ATOM	6187	H	TRP	36	55.494	26.090	59.209	1.00	0.00	B
ATOM	6188	CA	TRP	36	53.423	26.139	58.748	1.00	24.26	B
ATOM	6189	CB	TRP	36	53.420	25.311	57.481	1.00	24.82	B
ATOM	6190	CG	TRP	36	53.249	26.139	56.265	1.00	24.82	B
ATOM	6191	CD2	TRP	36	52.027	26.636	55.697	1.00	24.82	B
ATOM	6192	CE2	TRP	36	52.362	27.296	54.505	1.00	24.82	B
ATOM	6193	CE3	TRP	36	50.692	26.587	56.077	1.00	24.82	B
ATOM	6194	CD1	TRP	36	54.223	26.512	55.429	1.00	24.82	B
ATOM	6195	NE1	TRP	36	53.712	27.203	54.367	1.00	24.82	B
ATOM	6196	HE1	TRP	36	54.248	27.575	53.636	1.00	0.00	B
ATOM	6197	CZ2	TRP	36	51.422	27.901	53.688	1.00	24.82	B
ATOM	6198	CZ3	TRP	36	49.757	27.188	55.264	1.00	24.82	B
ATOM	6199	CH2	TRP	36	50.126	27.837	54.082	1.00	24.82	B
ATOM	6200	C	TRP	36	52.949	25.294	59.942	1.00	24.26	B
ATOM	6201	O	TRP	36	53.659	24.436	60.432	1.00	24.82	B
ATOM	6202	N	VAL	37	51.737	25.542	60.413	1.00	17.00	B
ATOM	6203	H	VAL	37	51.215	26.217	59.968	1.00	0.00	B
ATOM	6204	CA	VAL	37	51.235	24.809	61.546	1.00	17.00	B
ATOM	6205	CB	VAL	37	51.213	25.705	62.784	1.00	24.34	B
ATOM	6206	CG1	VAL	37	50.482	25.019	63.901	1.00	24.34	B
ATOM	6207	CG2	VAL	37	52.611	26.043	63.205	1.00	24.34	B
ATOM	6208	C	VAL	37	49.840	24.199	61.373	1.00	17.00	B
ATOM	6209	O	VAL	37	48.922	24.818	60.830	1.00	24.34	B
ATOM	6210	N	LYS	38	49.705	22.970	61.861	1.00	27.82	B
ATOM	6211	H	LYS	38	50.499	22.557	62.273	1.00	0.00	B
ATOM	6212	CA	LYS	38	48.461	22.203	61.837	1.00	27.82	B
ATOM	6213	CB	LYS	38	48.792	20.758	61.429	1.00	7.99	B

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ATOM	6214	CG	LYS	38	47.884	19.679	61.982	1.00	7.99	B
ATOM	6215	CD	LYS	38	47.678	18.619	60.922	1.00	7.99	B
ATOM	6216	CE	LYS	38	46.990	17.365	61.455	1.00	7.99	B
ATOM	6217	NZ	LYS	38	46.664	16.496	60.344	1.00	7.99	B
ATOM	6218	HZ1	LYS	38	45.771	16.827	59.927	1.00	0.00	B
ATOM	6219	HZ2	LYS	38	46.593	15.492	60.606	1.00	0.00	B
ATOM	6220	HZ3	LYS	38	47.410	16.630	59.632	1.00	0.00	B
ATOM	6221	C	LYS	38	47.773	22.213	63.234	1.00	27.82	B
ATOM	6222	O	LYS	38	48.452	22.177	64.276	1.00	7.99	B
ATOM	6223	N	GLN	39	46.442	22.303	63.254	1.00	13.93	B
ATOM	6224	H	GLN	39	45.967	22.412	62.396	1.00	0.00	B
ATOM	6225	CA	GLN	39	45.672	22.267	64.504	1.00	13.93	B
ATOM	6226	CB	GLN	39	45.330	23.657	65.023	1.00	23.94	B
ATOM	6227	CG	GLN	39	44.852	23.675	66.489	1.00	23.94	B
ATOM	6228	CD	GLN	39	44.600	25.119	67.041	1.00	23.94	B
ATOM	6229	OE1	GLN	39	44.128	26.031	66.327	1.00	23.94	B
ATOM	6230	NE2	GLN	39	44.927	25.315	68.319	1.00	23.94	B
ATOM	6231	HE21	GLN	39	45.117	26.229	68.623	1.00	0.00	B
ATOM	6232	HE22	GLN	39	44.968	24.533	68.918	1.00	0.00	B
ATOM	6233	C	GLN	39	44.388	21.493	64.297	1.00	13.93	B
ATOM	6234	O	GLN	39	43.380	22.016	63.794	1.00	23.94	B
ATOM	6235	N	ALA	40	44.435	20.228	64.692	1.00	30.38	B
ATOM	6236	H	ALA	40	45.261	19.871	65.078	1.00	0.00	B
ATOM	6237	CA	ALA	40	43.270	19.355	64.587	1.00	30.38	B
ATOM	6238	CB	ALA	40	43.671	17.908	64.171	1.00	12.18	B
ATOM	6239	C	ALA	40	42.569	19.322	65.931	1.00	30.38	B
ATOM	6240	O	ALA	40	43.220	19.472	66.981	1.00	12.18	B
ATOM	6241	N	PRO	41	41.239	19.080	65.905	1.00	25.70	B
ATOM	6242	CD	PRO	41	40.562	18.728	64.651	1.00	29.72	B
ATOM	6243	CA	PRO	41	40.287	18.991	67.022	1.00	25.70	B
ATOM	6244	CB	PRO	41	39.402	17.804	66.641	1.00	29.72	B
ATOM	6245	CG	PRO	41	39.642	17.617	65.117	1.00	29.72	B
ATOM	6246	C	PRO	41	41.011	18.739	68.324	1.00	25.70	B
ATOM	6247	O	PRO	41	41.900	17.865	68.373	1.00	29.72	B
ATOM	6248	N	GLY	42	40.667	19.492	69.361	1.00	19.38	B
ATOM	6249	H	GLY	42	39.987	20.189	69.297	1.00	0.00	B
ATOM	6250	CA	GLY	42	41.331	19.274	70.625	1.00	19.38	B
ATOM	6251	C	GLY	42	42.718	18.616	70.514	1.00	19.38	B
ATOM	6252	O	GLY	42	43.036	17.557	71.134	1.00	25.17	B
ATOM	6253	N	GLN	43	43.547	19.207	69.669	1.00	25.41	B
ATOM	6254	H	GLN	43	43.249	19.972	69.138	1.00	0.00	B
ATOM	6255	CA	GLN	43	44.903	18.726	69.555	1.00	25.41	B
ATOM	6256	CB	GLN	43	45.160	18.114	68.167	1.00	39.91	B
ATOM	6257	CG	GLN	43	46.612	18.282	67.631	1.00	39.91	B
ATOM	6258	CD	GLN	43	47.606	17.291	68.263	1.00	39.91	B
ATOM	6259	OE1	GLN	43	47.692	16.119	67.851	1.00	39.91	B
ATOM	6260	NE2	GLN	43	48.373	17.764	69.253	1.00	39.91	B
ATOM	6261	HE21	GLN	43	48.570	17.190	70.010	1.00	0.00	B
ATOM	6262	HE22	GLN	43	48.712	18.688	69.164	1.00	0.00	B
ATOM	6263	C	GLN	43	45.756	19.993	69.776	1.00	25.41	B
ATOM	6264	O	GLN	43	45.248	21.137	69.740	1.00	39.91	B
ATOM	6265	N	GLY	44	47.038	19.780	70.039	1.00	41.21	B
ATOM	6266	H	GLY	44	47.375	18.874	70.130	1.00	0.00	B
ATOM	6267	CA	GLY	44	47.928	20.903	70.207	1.00	41.21	B
ATOM	6268	C	GLY	44	48.180	21.534	68.858	1.00	41.21	B
ATOM	6269	O	GLY	44	47.278	21.695	68.030	1.00	27.23	B

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ATOM	6270	N	LEU	45	49.431	21.881	68.638	1.00	23.21	B
ATOM	6271	H	LEU	45	50.102	21.722	69.321	1.00	0.00	B
ATOM	6272	CA	LEU	45	49.811	22.504	67.402	1.00	23.21	B
ATOM	6273	CB	LEU	45	50.160	23.981	67.655	1.00	34.34	B
ATOM	6274	CG	LEU	45	49.063	25.046	67.740	1.00	34.34	B
ATOM	6275	CD1	LEU	45	47.779	24.517	67.190	1.00	34.34	B
ATOM	6276	CD2	LEU	45	48.912	25.480	69.158	1.00	34.34	B
ATOM	6277	C	LEU	45	51.020	21.772	66.843	1.00	23.21	B
ATOM	6278	O	LEU	45	52.140	21.989	67.294	1.00	34.34	B
ATOM	6279	N	GLU	46	50.820	20.881	65.883	1.00	21.92	B
ATOM	6280	H	GLU	46	49.919	20.675	65.565	1.00	0.00	B
ATOM	6281	CA	GLU	46	51.984	20.216	65.311	1.00	21.92	B
ATOM	6282	CB	GLU	46	51.572	18.971	64.522	1.00	46.51	B
ATOM	6283	CG	GLU	46	51.676	17.651	65.261	1.00	46.51	B
ATOM	6284	CD	GLU	46	51.691	16.464	64.296	1.00	46.51	B
ATOM	6285	OE1	GLU	46	50.660	16.257	63.616	1.00	46.51	B
ATOM	6286	OE2	GLU	46	52.733	15.752	64.212	1.00	46.51	B
ATOM	6287	C	GLU	46	52.631	21.211	64.354	1.00	21.92	B
ATOM	6288	O	GLU	46	51.944	21.832	63.544	1.00	46.51	B
ATOM	6289	N	TRP	47	53.941	21.388	64.473	1.00	13.78	B
ATOM	6290	H	TRP	47	54.435	20.935	65.176	1.00	0.00	B
ATOM	6291	CA	TRP	47	54.664	22.275	63.549	1.00	13.78	B
ATOM	6292	CB	TRP	47	55.980	22.760	64.161	1.00	24.38	B
ATOM	6293	CG	TRP	47	56.864	23.367	63.180	1.00	24.38	B
ATOM	6294	CD2	TRP	47	57.917	22.721	62.463	1.00	24.38	B
ATOM	6295	CE2	TRP	47	58.532	23.703	61.652	1.00	24.38	B
ATOM	6296	CE3	TRP	47	58.407	21.404	62.423	1.00	24.38	B
ATOM	6297	CD1	TRP	47	56.875	24.656	62.790	1.00	24.38	B
ATOM	6298	NE1	TRP	47	57.869	24.879	61.875	1.00	24.38	B
ATOM	6299	HE1	TRP	47	58.074	25.728	61.443	1.00	0.00	B
ATOM	6300	CZ2	TRP	47	59.623	23.410	60.802	1.00	24.38	B
ATOM	6301	CZ3	TRP	47	59.483	21.115	61.578	1.00	24.38	B
ATOM	6302	CH2	TRP	47	60.079	22.110	60.782	1.00	24.38	B
ATOM	6303	C	TRP	47	54.952	21.408	62.341	1.00	13.78	B
ATOM	6304	O	TRP	47	55.541	20.342	62.471	1.00	24.38	B
ATOM	6305	N	ILE	48	54.514	21.860	61.175	1.00	20.10	B
ATOM	6306	H	ILE	48	54.061	22.725	61.134	1.00	0.00	B
ATOM	6307	CA	ILE	48	54.701	21.112	59.948	1.00	20.10	B
ATOM	6308	CB	ILE	48	53.752	21.580	58.897	1.00	13.68	B
ATOM	6309	CG2	ILE	48	54.142	20.971	57.551	1.00	13.68	B
ATOM	6310	CG1	ILE	48	52.339	21.209	59.272	1.00	13.68	B
ATOM	6311	CD1	ILE	48	51.341	21.836	58.320	1.00	13.68	B
ATOM	6312	C	ILE	48	56.114	21.244	59.345	1.00	20.10	B
ATOM	6313	O	ILE	48	56.870	20.258	59.234	1.00	13.68	B
ATOM	6314	N	GLY	49	56.437	22.467	58.927	1.00	28.68	B
ATOM	6315	H	GLY	49	55.790	23.199	59.023	1.00	0.00	B
ATOM	6316	CA	GLY	49	57.719	22.723	58.331	1.00	28.68	B
ATOM	6317	C	GLY	49	57.916	24.204	58.180	1.00	28.68	B
ATOM	6318	O	GLY	49	57.119	25.018	58.697	1.00	4.08	B
ATOM	6319	N	GLU	50	59.010	24.525	57.486	1.00	29.75	B
ATOM	6320	H	GLU	50	59.572	23.804	57.155	1.00	0.00	B
ATOM	6321	CA	GLU	50	59.418	25.891	57.189	1.00	29.75	B
ATOM	6322	CB	GLU	50	60.515	26.351	58.131	1.00	9.52	B
ATOM	6323	CG	GLU	50	61.704	25.467	58.055	1.00	9.52	B
ATOM	6324	CD	GLU	50	62.784	25.826	59.060	1.00	9.52	B
ATOM	6325	OE1	GLU	50	62.779	26.941	59.610	1.00	9.52	B

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ATOM	6326	OE2	GLU	50	63.661	24.975	59.309	1.00	9.52	B
ATOM	6327	C	GLU	50	59.958	25.979	55.774	1.00	29.75	B
ATOM	6328	O	GLU	50	60.350	24.980	55.160	1.00	9.52	B
ATOM	6329	N	ILE	51	59.927	27.204	55.273	1.00	23.36	B
ATOM	6330	H	ILE	51	59.527	27.917	55.813	1.00	0.00	B
ATOM	6331	CA	ILE	51	60.443	27.553	53.968	1.00	23.36	B
ATOM	6332	CB	ILE	51	59.369	27.835	52.922	1.00	5.75	B
ATOM	6333	CG2	ILE	51	58.686	29.170	53.167	1.00	5.75	B
ATOM	6334	CG1	ILE	51	60.043	27.877	51.557	1.00	5.75	B
ATOM	6335	CD1	ILE	51	59.136	27.381	50.434	1.00	5.75	B
ATOM	6336	C	ILE	51	61.124	28.850	54.259	1.00	23.36	B
ATOM	6337	O	ILE	51	60.654	29.623	55.116	1.00	5.75	B
ATOM	6338	N	ASN	52	62.242	29.064	53.578	1.00	18.14	B
ATOM	6339	H	ASN	52	62.577	28.382	52.953	1.00	0.00	B
ATOM	6340	CA	ASN	52	63.004	30.292	53.719	1.00	18.14	B
ATOM	6341	CB	ASN	52	64.489	30.027	53.715	1.00	26.63	B
ATOM	6342	CG	ASN	52	65.258	31.289	53.699	1.00	26.63	B
ATOM	6343	OD1	ASN	52	64.776	32.325	53.200	1.00	26.63	B
ATOM	6344	ND2	ASN	52	66.459	31.243	54.252	1.00	26.63	B
ATOM	6345	HD21	ASN	52	66.719	31.972	54.849	1.00	0.00	B
ATOM	6346	HD22	ASN	52	67.052	30.487	54.049	1.00	0.00	B
ATOM	6347	C	ASN	52	62.592	31.059	52.467	1.00	18.14	B
ATOM	6348	O	ASN	52	63.093	30.864	51.375	1.00	26.63	B
ATOM	6349	N	PRO	53	61.671	31.980	52.640	1.00	21.90	B
ATOM	6350	CD	PRO	53	61.081	32.385	53.932	1.00	14.37	B
ATOM	6351	CA	PRO	53	61.172	32.756	51.510	1.00	21.90	B
ATOM	6352	CB	PRO	53	60.373	33.860	52.190	1.00	14.37	B
ATOM	6353	CG	PRO	53	59.938	33.197	53.523	1.00	14.37	B
ATOM	6354	C	PRO	53	62.148	33.277	50.454	1.00	21.90	B
ATOM	6355	O	PRO	53	61.772	33.466	49.298	1.00	14.37	B
ATOM	6356	N	SER	54	63.398	33.500	50.813	1.00	31.61	B
ATOM	6357	H	SER	54	63.717	33.289	51.714	1.00	0.00	B
ATOM	6358	CA	SER	54	64.306	34.067	49.814	1.00	31.61	B
ATOM	6359	CB	SER	54	65.306	34.994	50.490	1.00	33.54	B
ATOM	6360	OG	SER	54	66.308	34.189	51.112	1.00	33.54	B
ATOM	6361	HG	SER	54	67.093	34.719	51.259	1.00	0.00	B
ATOM	6362	C	SER	54	65.111	33.008	49.112	1.00	31.61	B
ATOM	6363	O	SER	54	65.708	33.240	48.072	1.00	33.54	B
ATOM	6364	N	ASN	55	65.105	31.854	49.740	1.00	30.07	B
ATOM	6365	H	ASN	55	64.523	31.795	50.528	1.00	0.00	B
ATOM	6366	CA	ASN	55	65.860	30.677	49.383	1.00	30.07	B
ATOM	6367	CB	ASN	55	66.232	30.058	50.724	1.00	22.32	B
ATOM	6368	CG	ASN	55	67.441	29.257	50.685	1.00	22.32	B
ATOM	6369	OD1	ASN	55	68.248	29.306	51.632	1.00	22.32	B
ATOM	6370	ND2	ASN	55	67.600	28.476	49.630	1.00	22.32	B
ATOM	6371	HD21	ASN	55	67.130	28.677	48.802	1.00	0.00	B
ATOM	6372	HD22	ASN	55	68.210	27.707	49.745	1.00	0.00	B
ATOM	6373	C	ASN	55	65.063	29.651	48.570	1.00	30.07	B
ATOM	6374	O	ASN	55	65.323	29.378	47.398	1.00	22.32	B
ATOM	6375	N	GLY	56	64.086	29.074	49.261	1.00	11.90	B
ATOM	6376	H	GLY	56	63.927	29.383	50.178	1.00	0.00	B
ATOM	6377	CA	GLY	56	63.250	28.034	48.719	1.00	11.90	B
ATOM	6378	C	GLY	56	63.681	26.985	49.685	1.00	11.90	B
ATOM	6379	O	GLY	56	63.180	25.861	49.693	1.00	14.15	B
ATOM	6380	N	ASP	57	64.672	27.364	50.498	1.00	25.11	B
ATOM	6381	H	ASP	57	65.105	28.233	50.439	1.00	0.00	B

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ATOM	6382	CA	ASP	57	65.178	26.468	51.530	1.00	25.11	B
ATOM	6383	CB	ASP	57	65.996	27.232	52.592	1.00	50.08	B
ATOM	6384	CG	ASP	57	67.500	26.891	52.550	1.00	50.08	B
ATOM	6385	OD1	ASP	57	68.242	27.379	53.445	1.00	50.08	B
ATOM	6386	OD2	ASP	57	67.929	26.150	51.621	1.00	50.08	B
ATOM	6387	C	ASP	57	63.936	25.852	52.160	1.00	25.11	B
ATOM	6388	O	ASP	57	62.837	26.405	52.116	1.00	50.08	B
ATOM	6389	N	THR	58	64.116	24.705	52.768	1.00	23.81	B
ATOM	6390	H	THR	58	65.017	24.319	52.840	1.00	0.00	B
ATOM	6391	CA	THR	58	62.987	24.031	53.301	1.00	23.81	B
ATOM	6392	CB	THR	58	62.263	23.352	52.163	1.00	6.84	B
ATOM	6393	OG1	THR	58	61.030	24.020	51.921	1.00	6.84	B
ATOM	6394	HG1	THR	58	60.519	23.534	51.269	1.00	0.00	B
ATOM	6395	CG2	THR	58	62.038	21.929	52.458	1.00	6.84	B
ATOM	6396	C	THR	58	63.334	23.009	54.335	1.00	23.81	B
ATOM	6397	O	THR	58	64.174	22.145	54.116	1.00	6.84	B
ATOM	6398	N	ASN	59	62.683	23.111	55.482	1.00	39.84	B
ATOM	6399	H	ASN	59	62.066	23.860	55.635	1.00	0.00	B
ATOM	6400	CA	ASN	59	62.889	22.115	56.508	1.00	39.84	B
ATOM	6401	CB	ASN	59	63.611	22.702	57.700	1.00	27.13	B
ATOM	6402	CG	ASN	59	65.024	22.198	57.795	1.00	27.13	B
ATOM	6403	OD1	ASN	59	65.677	21.965	56.769	1.00	27.13	B
ATOM	6404	ND2	ASN	59	65.512	22.010	59.018	1.00	27.13	B
ATOM	6405	HD21	ASN	59	65.153	21.276	59.550	1.00	0.00	B
ATOM	6406	HD22	ASN	59	66.212	22.625	59.326	1.00	0.00	B
ATOM	6407	C	ASN	59	61.523	21.551	56.864	1.00	39.84	B
ATOM	6408	O	ASN	59	60.509	22.215	56.669	1.00	27.13	B
ATOM	6409	N	PHE	60	61.494	20.324	57.372	1.00	21.62	B
ATOM	6410	H	PHE	60	62.342	19.863	57.543	1.00	0.00	B
ATOM	6411	CA	PHE	60	60.228	19.662	57.675	1.00	21.62	B
ATOM	6412	CB	PHE	60	59.850	18.747	56.556	1.00	21.15	B
ATOM	6413	CG	PHE	60	59.160	19.418	55.471	1.00	21.15	B
ATOM	6414	CD1	PHE	60	59.707	19.442	54.205	1.00	21.15	B
ATOM	6415	CD2	PHE	60	57.924	20.005	55.699	1.00	21.15	B
ATOM	6416	CE1	PHE	60	59.018	20.048	53.170	1.00	21.15	B
ATOM	6417	CE2	PHE	60	57.232	20.605	54.678	1.00	21.15	B
ATOM	6418	CZ	PHE	60	57.770	20.633	53.411	1.00	21.15	B
ATOM	6419	C	PHE	60	60.187	18.818	58.884	1.00	21.62	B
ATOM	6420	O	PHE	60	61.163	18.208	59.278	1.00	21.15	B
ATOM	6421	N	ASN	61	59.028	18.762	59.480	1.00	21.15	B
ATOM	6422	H	ASN	61	58.292	19.300	59.138	1.00	0.00	B
ATOM	6423	CA	ASN	61	58.893	17.903	60.606	1.00	21.15	B
ATOM	6424	CB	ASN	61	57.609	18.187	61.351	1.00	35.07	B
ATOM	6425	CG	ASN	61	57.444	17.291	62.527	1.00	35.07	B
ATOM	6426	OD1	ASN	61	57.777	16.126	62.452	1.00	35.07	B
ATOM	6427	ND2	ASN	61	56.935	17.823	63.627	1.00	35.07	B
ATOM	6428	HD21	ASN	61	56.241	17.314	64.099	1.00	0.00	B
ATOM	6429	HD22	ASN	61	57.266	18.701	63.917	1.00	0.00	B
ATOM	6430	C	ASN	61	58.766	16.619	59.818	1.00	21.15	B
ATOM	6431	O	ASN	61	57.904	16.500	58.940	1.00	35.07	B
ATOM	6432	N	GLU	62	59.654	15.676	60.084	1.00	39.28	B
ATOM	6433	H	GLU	62	60.349	15.837	60.754	1.00	0.00	B
ATOM	6434	CA	GLU	62	59.606	14.410	59.374	1.00	39.28	B
ATOM	6435	CB	GLU	62	60.631	13.428	59.969	1.00	51.78	B
ATOM	6436	CG	GLU	62	62.113	13.880	59.863	1.00	51.78	B
ATOM	6437	CD	GLU	62	62.618	14.046	58.416	1.00	51.78	B



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ATOM	6438	OE1 GLU	62	62.566	13.066	57.631	1.00	51.78	B
ATOM	6439	OE2 GLU	62	63.075	15.165	58.061	1.00	51.78	B
ATOM	6440	C GLU	62	58.190	13.787	59.347	1.00	39.28	B
ATOM	6441	O GLU	62	57.874	13.017	58.431	1.00	51.78	B
ATOM	6442	N LYS	63	57.329	14.113	60.324	1.00	21.82	B
ATOM	6443	H LYS	63	57.591	14.728	61.037	1.00	0.00	B
ATOM	6444	CA LYS	63	55.984	13.552	60.300	1.00	21.82	B
ATOM	6445	CB LYS	63	55.282	13.742	61.635	1.00	21.97	B
ATOM	6446	CG LYS	63	54.136	12.718	61.847	1.00	21.97	B
ATOM	6447	CD LYS	63	52.842	13.337	62.411	1.00	21.97	B
ATOM	6448	CE LYS	63	51.664	13.299	61.411	1.00	21.97	B
ATOM	6449	NZ LYS	63	50.439	14.074	61.869	1.00	21.97	B
ATOM	6450	HZ1 LYS	63	49.568	13.594	61.583	1.00	0.00	B
ATOM	6451	HZ2 LYS	63	50.477	15.032	61.470	1.00	0.00	B
ATOM	6452	HZ3 LYS	63	50.486	14.145	62.909	1.00	0.00	B
ATOM	6453	C LYS	63	55.126	14.114	59.140	1.00	21.82	B
ATOM	6454	O LYS	63	54.040	13.630	58.889	1.00	21.97	B
ATOM	6455	N PHE	64	55.623	15.111	58.412	1.00	28.41	B
ATOM	6456	H PHE	64	56.498	15.466	58.641	1.00	0.00	B
ATOM	6457	CA PHE	64	54.878	15.674	57.277	1.00	28.41	B
ATOM	6458	CB PHE	64	54.425	17.098	57.582	1.00	30.78	B
ATOM	6459	CG PHE	64	53.518	17.193	58.749	1.00	30.78	B
ATOM	6460	CD1 PHE	64	54.000	17.027	60.020	1.00	30.78	B
ATOM	6461	CD2 PHE	64	52.163	17.378	58.564	1.00	30.78	B
ATOM	6462	CE1 PHE	64	53.152	17.034	61.091	1.00	30.78	B
ATOM	6463	CE2 PHE	64	51.311	17.389	59.624	1.00	30.78	B
ATOM	6464	CZ PHE	64	51.802	17.214	60.898	1.00	30.78	B
ATOM	6465	C PHE	64	55.729	15.682	56.000	1.00	28.41	B
ATOM	6466	O PHE	64	55.282	16.187	54.961	1.00	30.78	B
ATOM	6467	N LYS	65	56.958	15.152	56.105	1.00	17.17	B
ATOM	6468	H LYS	65	57.226	14.841	56.992	1.00	0.00	B
ATOM	6469	CA LYS	65	57.920	15.011	55.005	1.00	17.17	B
ATOM	6470	CB LYS	65	58.838	13.824	55.300	1.00	42.93	B
ATOM	6471	CG LYS	65	60.196	14.129	55.874	1.00	42.93	B
ATOM	6472	CD LYS	65	61.287	13.393	55.122	1.00	42.93	B
ATOM	6473	CE LYS	65	62.551	14.256	54.977	1.00	42.93	B
ATOM	6474	NZ LYS	65	62.389	15.411	54.021	1.00	42.93	B
ATOM	6475	HZ1 LYS	65	61.792	15.142	53.212	1.00	0.00	B
ATOM	6476	HZ2 LYS	65	63.335	15.677	53.672	1.00	0.00	B
ATOM	6477	HZ3 LYS	65	61.982	16.209	54.537	1.00	0.00	B
ATOM	6478	C LYS	65	57.229	14.725	53.666	1.00	17.17	B
ATOM	6479	O LYS	65	57.636	15.265	52.633	1.00	42.93	B
ATOM	6480	N SER	66	56.177	13.891	53.671	1.00	36.21	B
ATOM	6481	H SER	66	55.872	13.526	54.525	1.00	0.00	B
ATOM	6482	CA SER	66	55.469	13.528	52.431	1.00	36.21	B
ATOM	6483	CB SER	66	55.226	12.029	52.388	1.00	22.53	B
ATOM	6484	OG SER	66	56.148	11.353	53.209	1.00	22.53	B
ATOM	6485	HG SER	66	56.007	10.404	53.145	1.00	0.00	B
ATOM	6486	C SER	66	54.131	14.200	52.205	1.00	36.21	B
ATOM	6487	O SER	66	53.670	14.366	51.053	1.00	22.53	B
ATOM	6488	N LYS	67	53.489	14.543	53.314	1.00	28.37	B
ATOM	6489	H LYS	67	53.905	14.368	54.176	1.00	0.00	B
ATOM	6490	CA LYS	67	52.187	15.166	53.253	1.00	28.37	B
ATOM	6491	CB LYS	67	51.539	15.192	54.653	1.00	21.48	B
ATOM	6492	CG LYS	67	50.490	14.089	54.899	1.00	21.48	B
ATOM	6493	CD LYS	67	49.695	13.699	53.660	1.00	21.48	B

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ATOM	6494	CE	LYS	67	48.419	12.978	54.058	1.00	21.48	B
ATOM	6495	NZ	LYS	67	48.412	11.453	53.864	1.00	21.48	B
ATOM	6496	HZ1	LYS	67	48.848	10.975	54.685	1.00	0.00	B
ATOM	6497	HZ2	LYS	67	48.935	11.206	53.002	1.00	0.00	B
ATOM	6498	HZ3	LYS	67	47.421	11.138	53.770	1.00	0.00	B
ATOM	6499	C	LYS	67	52.301	16.577	52.758	1.00	28.37	B
ATOM	6500	O	LYS	67	51.401	17.077	52.063	1.00	21.48	B
ATOM	6501	N	ALA	68	53.436	17.201	53.069	1.00	2.25	B
ATOM	6502	H	ALA	68	54.160	16.732	53.491	1.00	0.00	B
ATOM	6503	CA	ALA	68	53.570	18.607	52.764	1.00	2.25	B
ATOM	6504	CB	ALA	68	53.834	19.347	54.040	1.00	29.87	B
ATOM	6505	C	ALA	68	54.534	19.045	51.723	1.00	2.25	B
ATOM	6506	O	ALA	68	55.598	18.515	51.613	1.00	29.87	B
ATOM	6507	N	THR	69	54.141	20.044	50.977	1.00	15.37	B
ATOM	6508	H	THR	69	53.242	20.426	51.125	1.00	0.00	B
ATOM	6509	CA	THR	69	54.963	20.590	49.942	1.00	15.37	B
ATOM	6510	CB	THR	69	54.504	20.073	48.514	1.00	21.71	B
ATOM	6511	OG1	THR	69	54.695	18.651	48.427	1.00	21.71	B
ATOM	6512	HG1	THR	69	54.558	18.364	47.527	1.00	0.00	B
ATOM	6513	CG2	THR	69	55.315	20.723	47.413	1.00	21.71	B
ATOM	6514	C	THR	69	54.848	22.126	50.039	1.00	15.37	B
ATOM	6515	O	THR	69	53.873	22.749	49.595	1.00	21.71	B
ATOM	6516	N	LEU	70	55.881	22.729	50.611	1.00	21.90	B
ATOM	6517	H	LEU	70	56.631	22.187	50.919	1.00	0.00	B
ATOM	6518	CA	LEU	70	55.907	24.156	50.787	1.00	21.90	B
ATOM	6519	CB	LEU	70	56.519	24.497	52.146	1.00	4.97	B
ATOM	6520	CG	LEU	70	56.125	23.567	53.288	1.00	4.97	B
ATOM	6521	CD1	LEU	70	56.843	23.958	54.576	1.00	4.97	B
ATOM	6522	CD2	LEU	70	54.612	23.573	53.393	1.00	4.97	B
ATOM	6523	C	LEU	70	56.667	24.939	49.756	1.00	21.90	B
ATOM	6524	O	LEU	70	57.865	24.886	49.764	1.00	4.97	B
ATOM	6525	N	THR	71	55.987	25.695	48.896	1.00	8.97	B
ATOM	6526	H	THR	71	55.001	25.659	48.902	1.00	0.00	B
ATOM	6527	CA	THR	71	56.673	26.552	47.959	1.00	8.97	B
ATOM	6528	CB	THR	71	56.199	26.293	46.588	1.00	18.73	B
ATOM	6529	OG1	THR	71	54.960	26.978	46.355	1.00	18.73	B
ATOM	6530	HG1	THR	71	54.966	27.373	45.475	1.00	0.00	B
ATOM	6531	CG2	THR	71	56.066	24.805	46.401	1.00	18.73	B
ATOM	6532	C	THR	71	56.360	28.002	48.317	1.00	8.97	B
ATOM	6533	O	THR	71	55.684	28.281	49.328	1.00	18.73	B
ATOM	6534	N	VAL	72	56.842	28.943	47.513	1.00	14.83	B
ATOM	6535	H	VAL	72	57.401	28.688	46.747	1.00	0.00	B
ATOM	6536	CA	VAL	72	56.549	30.355	47.751	1.00	14.83	B
ATOM	6537	CB	VAL	72	57.604	31.051	48.671	1.00	19.72	B
ATOM	6538	CG1	VAL	72	57.717	30.337	49.962	1.00	19.72	B
ATOM	6539	CG2	VAL	72	58.977	31.105	47.992	1.00	19.72	B
ATOM	6540	C	VAL	72	56.582	30.993	46.370	1.00	14.83	B
ATOM	6541	O	VAL	72	56.793	30.291	45.379	1.00	19.72	B
ATOM	6542	N	ASP	73	56.364	32.309	46.319	1.00	13.99	B
ATOM	6543	H	ASP	73	56.199	32.775	47.174	1.00	0.00	B
ATOM	6544	CA	ASP	73	56.341	33.106	45.101	1.00	13.99	B
ATOM	6545	CB	ASP	73	54.933	33.147	44.514	1.00	22.49	B
ATOM	6546	CG	ASP	73	54.755	34.264	43.456	1.00	22.49	B
ATOM	6547	OD1	ASP	73	55.369	35.369	43.538	1.00	22.49	B
ATOM	6548	OD2	ASP	73	53.967	34.025	42.522	1.00	22.49	B
ATOM	6549	C	ASP	73	56.738	34.512	45.532	1.00	13.99	B

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ATOM	6550	O	ASP	73	55.882	35.359	45.825	1.00	22.49	B
ATOM	6551	N	LYS	74	58.040	34.758	45.562	1.00	23.55	B
ATOM	6552	H	LYS	74	58.663	34.056	45.292	1.00	0.00	B
ATOM	6553	CA	LYS	74	58.563	36.048	45.998	1.00	23.55	B
ATOM	6554	CB	LYS	74	60.037	36.125	45.652	1.00	29.78	B
ATOM	6555	CG	LYS	74	60.913	36.172	46.877	1.00	29.78	B
ATOM	6556	CD	LYS	74	61.835	34.949	46.936	1.00	29.78	B
ATOM	6557	CE	LYS	74	63.147	35.190	46.169	1.00	29.78	B
ATOM	6558	NZ	LYS	74	63.007	34.955	44.690	1.00	29.78	B
ATOM	6559	HZ1	LYS	74	63.765	34.319	44.348	1.00	0.00	B
ATOM	6560	HZ2	LYS	74	63.085	35.873	44.220	1.00	0.00	B
ATOM	6561	HZ3	LYS	74	62.077	34.526	44.486	1.00	0.00	B
ATOM	6562	C	LYS	74	57.847	37.284	45.465	1.00	23.55	B
ATOM	6563	O	LYS	74	57.632	38.288	46.171	1.00	29.78	B
ATOM	6564	N	SER	75	57.484	37.194	44.200	1.00	31.34	B
ATOM	6565	H	SER	75	57.648	36.371	43.695	1.00	0.00	B
ATOM	6566	CA	SER	75	56.862	38.303	43.535	1.00	31.34	B
ATOM	6567	CB	SER	75	56.574	37.945	42.068	1.00	22.96	B
ATOM	6568	OG	SER	75	55.356	37.213	41.958	1.00	22.96	B
ATOM	6569	HG	SER	75	55.365	36.720	41.137	1.00	0.00	B
ATOM	6570	C	SER	75	55.602	38.679	44.253	1.00	31.34	B
ATOM	6571	O	SER	75	55.284	39.869	44.350	1.00	22.96	B
ATOM	6572	N	ALA	76	54.884	37.678	44.774	1.00	17.90	B
ATOM	6573	H	ALA	76	55.205	36.766	44.714	1.00	0.00	B
ATOM	6574	CA	ALA	76	53.605	37.974	45.433	1.00	17.90	B
ATOM	6575	CB	ALA	76	52.481	37.166	44.785	1.00	18.84	B
ATOM	6576	C	ALA	76	53.553	37.803	46.920	1.00	17.90	B
ATOM	6577	O	ALA	76	52.483	37.851	47.500	1.00	18.84	B
ATOM	6578	N	SER	77	54.712	37.608	47.535	1.00	28.55	B
ATOM	6579	H	SER	77	55.542	37.599	47.003	1.00	0.00	B
ATOM	6580	CA	SER	77	54.798	37.419	48.984	1.00	28.55	B
ATOM	6581	CB	SER	77	54.642	38.741	49.671	1.00	14.82	B
ATOM	6582	OG	SER	77	54.654	39.712	48.647	1.00	14.82	B
ATOM	6583	HG	SER	77	54.243	40.531	48.937	1.00	0.00	B
ATOM	6584	C	SER	77	53.678	36.519	49.379	1.00	28.55	B
ATOM	6585	O	SER	77	52.787	36.918	50.069	1.00	14.82	B
ATOM	6586	N	THR	78	53.728	35.292	48.900	1.00	2.79	B
ATOM	6587	H	THR	78	54.488	35.022	48.338	1.00	0.00	B
ATOM	6588	CA	THR	78	52.685	34.355	49.190	1.00	2.79	B
ATOM	6589	CB	THR	78	51.706	34.211	48.016	1.00	5.58	B
ATOM	6590	OG1	THR	78	50.935	35.398	47.892	1.00	5.58	B
ATOM	6591	HG1	THR	78	50.218	35.419	48.526	1.00	0.00	B
ATOM	6592	CG2	THR	78	50.763	33.058	48.246	1.00	5.58	B
ATOM	6593	C	THR	78	53.312	33.022	49.426	1.00	2.79	B
ATOM	6594	O	THR	78	53.928	32.505	48.562	1.00	5.58	B
ATOM	6595	N	ALA	79	53.168	32.487	50.623	1.00	13.42	B
ATOM	6596	H	ALA	79	52.684	32.976	51.326	1.00	0.00	B
ATOM	6597	CA	ALA	79	53.727	31.196	50.923	1.00	13.42	B
ATOM	6598	CB	ALA	79	53.992	31.058	52.413	1.00	20.49	B
ATOM	6599	C	ALA	79	52.651	30.233	50.465	1.00	13.42	B
ATOM	6600	O	ALA	79	51.480	30.573	50.502	1.00	20.49	B
ATOM	6601	N	TYR	80	53.046	29.050	49.991	1.00	13.55	B
ATOM	6602	H	TYR	80	53.997	28.864	49.932	1.00	0.00	B
ATOM	6603	CA	TYR	80	52.090	28.040	49.552	1.00	13.55	B
ATOM	6604	CB	TYR	80	52.175	27.864	48.034	1.00	14.48	B
ATOM	6605	CG	TYR	80	51.566	29.009	47.251	1.00	14.48	B

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ATOM	6606	CD1 TYR	80	50.196	29.024	46.968	1.00	14.48	B
ATOM	6607	CE1 TYR	80	49.622	30.071	46.278	1.00	14.48	B
ATOM	6608	CD2 TYR	80	52.350	30.100	46.810	1.00	14.48	B
ATOM	6609	CE2 TYR	80	51.778	31.162	46.114	1.00	14.48	B
ATOM	6610	CZ TYR	80	50.410	31.145	45.848	1.00	14.48	B
ATOM	6611	OH TYR	80	49.779	32.189	45.161	1.00	14.48	B
ATOM	6612	HH TYR	80	48.878	31.937	44.958	1.00	0.00	B
ATOM	6613	C TYR	80	52.400	26.714	50.241	1.00	13.55	B
ATOM	6614	O TYR	80	53.558	26.434	50.537	1.00	14.48	B
ATOM	6615	N MET	81	51.375	25.922	50.534	1.00	2.00	B
ATOM	6616	H MET	81	50.467	26.243	50.344	1.00	0.00	B
ATOM	6617	CA MET	81	51.540	24.585	51.113	1.00	2.00	B
ATOM	6618	CB MET	81	51.155	24.523	52.589	1.00	15.81	B
ATOM	6619	CG MET	81	50.611	23.137	53.056	1.00	15.81	B
ATOM	6620	SD MET	81	51.195	22.558	54.715	1.00	15.81	B
ATOM	6621	CE MET	81	50.026	23.297	55.780	1.00	15.81	B
ATOM	6622	C MET	81	50.648	23.614	50.327	1.00	2.00	B
ATOM	6623	O MET	81	49.532	23.945	49.935	1.00	15.81	B
ATOM	6624	N GLU	82	51.183	22.424	50.053	1.00	26.13	B
ATOM	6625	H GLU	82	52.098	22.233	50.344	1.00	0.00	B
ATOM	6626	CA GLU	82	50.444	21.398	49.328	1.00	26.13	B
ATOM	6627	CB GLU	82	51.050	21.098	47.966	1.00	29.86	B
ATOM	6628	CG GLU	82	50.106	20.268	47.100	1.00	29.86	B
ATOM	6629	CD GLU	82	50.058	20.750	45.674	1.00	29.86	B
ATOM	6630	OE1 GLU	82	49.644	21.902	45.433	1.00	29.86	B
ATOM	6631	OE2 GLU	82	50.447	19.974	44.784	1.00	29.86	B
ATOM	6632	C GLU	82	50.419	20.140	50.138	1.00	26.13	B
ATOM	6633	O GLU	82	51.442	19.680	50.640	1.00	29.86	B
ATOM	6634	N LEU	83	49.226	19.597	50.284	1.00	24.49	B
ATOM	6635	H LEU	83	48.440	20.005	49.867	1.00	0.00	B
ATOM	6636	CA LEU	83	49.079	18.397	51.054	1.00	24.49	B
ATOM	6637	CB LEU	83	48.071	18.610	52.188	1.00	18.65	B
ATOM	6638	CG LEU	83	48.430	19.641	53.270	1.00	18.65	B
ATOM	6639	CD1 LEU	83	47.154	20.082	53.975	1.00	18.65	B
ATOM	6640	CD2 LEU	83	49.405	19.055	54.314	1.00	18.65	B
ATOM	6641	C LEU	83	48.628	17.317	50.074	1.00	24.49	B
ATOM	6642	O LEU	83	47.656	17.512	49.282	1.00	18.65	B
ATOM	6643	N SER	84	49.354	16.183	50.139	1.00	21.24	B
ATOM	6644	H SER	84	50.068	16.147	50.810	1.00	0.00	B
ATOM	6645	CA SER	84	49.142	15.008	49.282	1.00	21.24	B
ATOM	6646	CB SER	84	50.454	14.348	48.961	1.00	12.58	B
ATOM	6647	OG SER	84	50.596	13.205	49.810	1.00	12.58	B
ATOM	6648	HG SER	84	51.460	13.190	50.218	1.00	0.00	B
ATOM	6649	C SER	84	48.286	13.899	49.844	1.00	21.24	B
ATOM	6650	O SER	84	48.401	13.525	51.000	1.00	12.58	B
ATOM	6651	N SER	85	47.463	13.346	48.973	1.00	12.92	B
ATOM	6652	H SER	85	47.430	13.685	48.050	1.00	0.00	B
ATOM	6653	CA SER	85	46.599	12.237	49.336	1.00	12.92	B
ATOM	6654	CB SER	85	47.410	10.951	49.186	1.00	11.52	B
ATOM	6655	OG SER	85	48.717	11.297	48.802	1.00	11.52	B
ATOM	6656	HG SER	85	49.300	11.134	49.551	1.00	0.00	B
ATOM	6657	C SER	85	46.015	12.353	50.732	1.00	12.92	B
ATOM	6658	O SER	85	46.331	11.541	51.605	1.00	11.52	B
ATOM	6659	N LEU	86	45.114	13.321	50.939	1.00	25.57	B
ATOM	6660	H LEU	86	44.796	13.904	50.210	1.00	0.00	B
ATOM	6661	CA LEU	86	44.615	13.471	52.284	1.00	25.57	B

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ATOM	6662	CB	LEU	86	43.980	14.843	52.589	1.00	19.98	B
ATOM	6663	CG	LEU	86	44.178	16.094	51.753	1.00	19.98	B
ATOM	6664	CD1	LEU	86	42.969	17.010	51.946	1.00	19.98	B
ATOM	6665	CD2	LEU	86	45.439	16.792	52.153	1.00	19.98	B
ATOM	6666	C	LEU	86	43.650	12.423	52.660	1.00	25.57	B
ATOM	6667	O	LEU	86	42.993	11.804	51.834	1.00	19.98	B
ATOM	6668	N	ARG	87	43.607	12.241	53.959	1.00	10.09	B
ATOM	6669	H	ARG	87	44.177	12.729	54.564	1.00	0.00	B
ATOM	6670	CA	ARG	87	42.734	11.330	54.576	1.00	10.09	B
ATOM	6671	CB	ARG	87	43.500	10.116	55.120	1.00	21.35	B
ATOM	6672	CG	ARG	87	44.917	10.371	55.593	1.00	21.35	B
ATOM	6673	CD	ARG	87	45.548	9.076	56.104	1.00	21.35	B
ATOM	6674	NE	ARG	87	46.333	9.279	57.326	1.00	21.35	B
ATOM	6675	HE	ARG	87	46.477	10.204	57.626	1.00	0.00	B
ATOM	6676	CZ	ARG	87	46.867	8.296	58.058	1.00	21.35	B
ATOM	6677	NH1	ARG	87	46.690	7.031	57.685	1.00	21.35	B
ATOM	6678	HH11	ARG	87	47.511	6.491	57.498	1.00	0.00	B
ATOM	6679	HH12	ARG	87	45.808	6.571	57.827	1.00	0.00	B
ATOM	6680	NH2	ARG	87	47.603	8.578	59.136	1.00	21.35	B
ATOM	6681	HH21	ARG	87	47.193	9.168	59.840	1.00	0.00	B
ATOM	6682	HH22	ARG	87	48.400	8.028	59.362	1.00	0.00	B
ATOM	6683	C	ARG	87	42.154	12.134	55.705	1.00	10.09	B
ATOM	6684	O	ARG	87	42.618	13.221	56.027	1.00	21.35	B
ATOM	6685	N	SER	88	41.099	11.568	56.265	1.00	34.06	B
ATOM	6686	H	SER	88	40.779	10.722	55.883	1.00	0.00	B
ATOM	6687	CA	SER	88	40.370	12.109	57.390	1.00	34.06	B
ATOM	6688	CB	SER	88	39.763	10.940	58.087	1.00	25.88	B
ATOM	6689	OG	SER	88	40.800	9.963	58.102	1.00	25.88	B
ATOM	6690	HG	SER	88	41.097	9.819	59.007	1.00	0.00	B
ATOM	6691	C	SER	88	41.401	12.735	58.309	1.00	34.06	B
ATOM	6692	O	SER	88	41.315	13.894	58.668	1.00	25.88	B
ATOM	6693	N	GLU	89	42.377	11.919	58.687	1.00	14.66	B
ATOM	6694	H	GLU	89	42.379	11.005	58.342	1.00	0.00	B
ATOM	6695	CA	GLU	89	43.459	12.314	59.575	1.00	14.66	B
ATOM	6696	CB	GLU	89	44.553	11.233	59.516	1.00	19.94	B
ATOM	6697	CG	GLU	89	44.398	10.177	60.595	1.00	19.94	B
ATOM	6698	CD	GLU	89	43.931	8.795	60.088	1.00	19.94	B
ATOM	6699	OE1	GLU	89	43.734	7.876	60.961	1.00	19.94	B
ATOM	6700	OE2	GLU	89	43.772	8.630	58.843	1.00	19.94	B
ATOM	6701	C	GLU	89	44.046	13.705	59.294	1.00	14.66	B
ATOM	6702	O	GLU	89	44.622	14.323	60.183	1.00	19.94	B
ATOM	6703	N	ASP	90	43.907	14.176	58.052	1.00	27.36	B
ATOM	6704	H	ASP	90	43.455	13.603	57.418	1.00	0.00	B
ATOM	6705	CA	ASP	90	44.409	15.485	57.630	1.00	27.36	B
ATOM	6706	CB	ASP	90	44.713	15.450	56.147	1.00	26.45	B
ATOM	6707	CG	ASP	90	45.602	14.298	55.785	1.00	26.45	B
ATOM	6708	OD1	ASP	90	46.449	13.917	56.618	1.00	26.45	B
ATOM	6709	OD2	ASP	90	45.470	13.759	54.673	1.00	26.45	B
ATOM	6710	C	ASP	90	43.429	16.616	57.925	1.00	27.36	B
ATOM	6711	O	ASP	90	43.819	17.793	57.869	1.00	26.45	B
ATOM	6712	N	THR	91	42.172	16.283	58.243	1.00	3.02	B
ATOM	6713	H	THR	91	41.930	15.356	58.277	1.00	0.00	B
ATOM	6714	CA	THR	91	41.242	17.323	58.523	1.00	3.02	B
ATOM	6715	CB	THR	91	39.910	16.826	58.874	1.00	8.99	B
ATOM	6716	OG1	THR	91	39.396	16.033	57.808	1.00	8.99	B
ATOM	6717	HG1	THR	91	40.101	15.863	57.165	1.00	0.00	B

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ATOM	6718	CG2 THR	91	39.013	17.969	59.018	1.00	8.99	B
ATOM	6719	C THR	91	41.763	18.158	59.670	1.00	3.02	B
ATOM	6720	O THR	91	42.259	17.632	60.682	1.00	8.99	B
ATOM	6721	N ALA	92	41.681	19.474	59.491	1.00	9.04	B
ATOM	6722	H ALA	92	41.273	19.828	58.673	1.00	0.00	B
ATOM	6723	CA ALA	92	42.173	20.357	60.506	1.00	9.04	B
ATOM	6724	CB ALA	92	43.549	19.965	60.889	1.00	8.55	B
ATOM	6725	C ALA	92	42.164	21.779	60.024	1.00	9.04	B
ATOM	6726	O ALA	92	41.563	22.111	59.011	1.00	8.55	B
ATOM	6727	N VAL	93	42.798	22.639	60.807	1.00	16.84	B
ATOM	6728	H VAL	93	43.197	22.315	61.645	1.00	0.00	B
ATOM	6729	CA VAL	93	42.923	24.026	60.439	1.00	16.84	B
ATOM	6730	CB VAL	93	42.536	24.928	61.564	1.00	10.41	B
ATOM	6731	CG1 VAL	93	43.206	26.278	61.425	1.00	10.41	B
ATOM	6732	CG2 VAL	93	41.038	25.101	61.538	1.00	10.41	B
ATOM	6733	C VAL	93	44.389	24.068	60.187	1.00	16.84	B
ATOM	6734	O VAL	93	45.160	23.397	60.878	1.00	10.41	B
ATOM	6735	N TYR	94	44.778	24.779	59.141	1.00	13.89	B
ATOM	6736	H TYR	94	44.140	25.245	58.595	1.00	0.00	B
ATOM	6737	CA TYR	94	46.177	24.848	58.801	1.00	13.89	B
ATOM	6738	CB TYR	94	46.388	24.225	57.418	1.00	15.77	B
ATOM	6739	CG TYR	94	46.381	22.694	57.506	1.00	15.77	B
ATOM	6740	CD1 TYR	94	45.211	21.962	57.339	1.00	15.77	B
ATOM	6741	CE1 TYR	94	45.179	20.591	57.540	1.00	15.77	B
ATOM	6742	CD2 TYR	94	47.526	22.000	57.868	1.00	15.77	B
ATOM	6743	CE2 TYR	94	47.506	20.633	58.071	1.00	15.77	B
ATOM	6744	CZ TYR	94	46.338	19.926	57.912	1.00	15.77	B
ATOM	6745	OH TYR	94	46.368	18.546	58.139	1.00	15.77	B
ATOM	6746	HH TYR	94	46.927	18.131	57.467	1.00	0.00	B
ATOM	6747	C TYR	94	46.532	26.297	58.893	1.00	13.89	B
ATOM	6748	O TYR	94	45.904	27.153	58.270	1.00	15.77	B
ATOM	6749	N TYR	95	47.516	26.556	59.741	1.00	25.51	B
ATOM	6750	H TYR	95	47.878	25.802	60.193	1.00	0.00	B
ATOM	6751	CA TYR	95	48.027	27.886	60.023	1.00	25.51	B
ATOM	6752	CB TYR	95	48.253	28.027	61.512	1.00	18.69	B
ATOM	6753	CG TYR	95	47.022	28.281	62.280	1.00	18.69	B
ATOM	6754	CD1 TYR	95	46.253	29.409	62.017	1.00	18.69	B
ATOM	6755	CE1 TYR	95	45.148	29.677	62.768	1.00	18.69	B
ATOM	6756	CD2 TYR	95	46.645	27.428	63.308	1.00	18.69	B
ATOM	6757	CE2 TYR	95	45.523	27.682	64.087	1.00	18.69	B
ATOM	6758	CZ TYR	95	44.773	28.812	63.822	1.00	18.69	B
ATOM	6759	OH TYR	95	43.670	29.130	64.606	1.00	18.69	B
ATOM	6760	HH TYR	95	42.931	28.580	64.325	1.00	0.00	B
ATOM	6761	C TYR	95	49.352	28.173	59.415	1.00	25.51	B
ATOM	6762	O TYR	95	50.240	27.359	59.556	1.00	18.69	B
ATOM	6763	N CYS	96	49.489	29.341	58.792	1.00	15.24	B
ATOM	6764	H CYS	96	48.712	29.921	58.687	1.00	0.00	B
ATOM	6765	CA CYS	96	50.772	29.783	58.258	1.00	15.24	B
ATOM	6766	C CYS	96	51.203	30.902	59.198	1.00	15.24	B
ATOM	6767	O CYS	96	50.493	31.876	59.360	1.00	3.23	B
ATOM	6768	CB CYS	96	50.650	30.316	56.844	1.00	3.23	B
ATOM	6769	SG CYS	96	50.055	32.008	56.829	1.00	3.23	B
ATOM	6770	N THR	97	52.353	30.755	59.840	1.00	10.52	B
ATOM	6771	H THR	97	52.895	29.963	59.684	1.00	0.00	B
ATOM	6772	CA THR	97	52.834	31.775	60.777	1.00	10.52	B
ATOM	6773	CB THR	97	52.730	31.278	62.265	1.00	10.27	B

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ATOM	6774	OG1 THR	97	53.278	32.242	63.146	1.00	10.27	B
ATOM	6775	HG1 THR	97	53.177	31.919	64.055	1.00	0.00	B
ATOM	6776	CG2 THR	97	53.486	29.966	62.452	1.00	10.27	B
ATOM	6777	C THR	97	54.276	32.179	60.503	1.00	10.52	B
ATOM	6778	O THR	97	55.137	31.358	60.250	1.00	10.27	B
ATOM	6779	N ARG	98	54.506	33.465	60.603	1.00	5.82	B
ATOM	6780	H ARG	98	53.764	34.047	60.861	1.00	0.00	B
ATOM	6781	CA ARG	98	55.767	34.068	60.387	1.00	5.82	B
ATOM	6782	CB ARG	98	55.546	35.551	60.188	1.00	5.98	B
ATOM	6783	CG ARG	98	56.715	36.235	59.518	1.00	5.98	B
ATOM	6784	CD ARG	98	57.411	37.224	60.428	1.00	5.98	B
ATOM	6785	NE ARG	98	57.361	38.573	59.855	1.00	5.98	B
ATOM	6786	HE ARG	98	57.162	38.655	58.895	1.00	0.00	B
ATOM	6787	CZ ARG	98	57.561	39.697	60.545	1.00	5.98	B
ATOM	6788	NH1 ARG	98	57.812	39.670	61.859	1.00	5.98	B
ATOM	6789	HH11 ARG	98	58.294	38.883	62.254	1.00	0.00	B
ATOM	6790	HH12 ARG	98	57.528	40.424	62.443	1.00	0.00	B
ATOM	6791	NH2 ARG	98	57.494	40.858	59.913	1.00	5.98	B
ATOM	6792	HH21 ARG	98	58.325	41.264	59.530	1.00	0.00	B
ATOM	6793	HH22 ARG	98	56.603	41.279	59.718	1.00	0.00	B
ATOM	6794	C ARG	98	56.943	33.861	61.405	1.00	5.82	B
ATOM	6795	O ARG	98	56.787	33.735	62.655	1.00	5.98	B
ATOM	6796	N SER	99	58.131	33.862	60.781	1.00	29.71	B
ATOM	6797	H SER	99	58.110	33.956	59.798	1.00	0.00	B
ATOM	6798	CA SER	99	59.427	33.758	61.389	1.00	29.71	B
ATOM	6799	CB SER	99	59.934	35.138	61.728	1.00	37.92	B
ATOM	6800	OG SER	99	61.059	35.012	62.559	1.00	37.92	B
ATOM	6801	HG SER	99	61.839	34.812	62.020	1.00	0.00	B
ATOM	6802	C SER	99	59.530	32.913	62.598	1.00	29.71	B
ATOM	6803	O SER	99	59.302	31.716	62.523	1.00	37.92	B
ATOM	6804	N ASP	100	59.874	33.557	63.717	1.00	29.45	B
ATOM	6805	H ASP	100	60.014	34.523	63.778	1.00	0.00	B
ATOM	6806	CA ASP	100	60.080	32.887	65.004	1.00	29.45	B
ATOM	6807	CB ASP	100	61.350	33.533	65.727	1.00	35.57	B
ATOM	6808	CG ASP	100	62.288	34.443	64.781	1.00	35.57	B
ATOM	6809	OD1 ASP	100	63.331	33.924	64.243	1.00	35.57	B
ATOM	6810	OD2 ASP	100	61.997	35.684	64.643	1.00	35.57	B
ATOM	6811	C ASP	100	58.823	32.761	65.986	1.00	29.45	B
ATOM	6812	O ASP	100	58.959	32.758	67.251	1.00	35.57	B
ATOM	6813	N GLY	101	57.640	32.620	65.341	1.00	19.85	B
ATOM	6814	H GLY	101	57.670	32.618	64.371	1.00	0.00	B
ATOM	6815	CA GLY	101	56.302	32.468	65.945	1.00	19.85	B
ATOM	6816	C GLY	101	55.544	33.755	66.304	1.00	19.85	B
ATOM	6817	O GLY	101	54.949	33.843	67.363	1.00	21.58	B
ATOM	6818	N ASP	102	55.493	34.753	65.434	1.00	6.62	B
ATOM	6819	H ASP	102	55.878	34.659	64.538	1.00	0.00	B
ATOM	6820	CA ASP	102	54.862	35.993	65.856	1.00	6.62	B
ATOM	6821	CB ASP	102	55.925	37.031	66.208	1.00	19.71	B
ATOM	6822	CG ASP	102	56.656	37.612	64.962	1.00	19.71	B
ATOM	6823	OD1 ASP	102	56.363	37.203	63.810	1.00	19.71	B
ATOM	6824	OD2 ASP	102	57.543	38.487	65.164	1.00	19.71	B
ATOM	6825	C ASP	102	53.828	36.679	65.006	1.00	6.62	B
ATOM	6826	O ASP	102	53.572	37.872	65.191	1.00	19.71	B
ATOM	6827	N SER	103	53.250	35.941	64.076	1.00	7.99	B
ATOM	6828	H SER	103	53.554	35.016	63.943	1.00	0.00	B
ATOM	6829	CA SER	103	52.173	36.447	63.258	1.00	7.99	B

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ATOM 6830 CB SER 103	52.676	37.354	62.169	1.00	16.49	B
ATOM 6831 OG SER 103	53.887	37.942	62.577	1.00	16.49	B
ATOM 6832 HG SER 103	54.346	38.302	61.813	1.00	0.00	B
ATOM 6833 C SER 103	51.609	35.185	62.672	1.00	7.99	B
ATOM 6834 O SER 103	52.356	34.258	62.318	1.00	16.49	B
ATOM 6835 N TRP 104	50.286	35.126	62.588	1.00	5.97	B
ATOM 6836 H TRP 104	49.733	35.869	62.878	1.00	0.00	B
ATOM 6837 CA TRP 104	49.680	33.940	62.050	1.00	5.97	B
ATOM 6838 CB TRP 104	49.077	33.128	63.194	1.00	8.99	B
ATOM 6839 CG TRP 104	50.102	32.595	64.209	1.00	8.99	B
ATOM 6840 CD2 TRP 104	50.289	31.225	64.586	1.00	8.99	B
ATOM 6841 CE2 TRP 104	51.197	31.208	65.664	1.00	8.99	B
ATOM 6842 CE3 TRP 104	49.772	30.015	64.120	1.00	8.99	B
ATOM 6843 CD1 TRP 104	50.903	33.328	65.045	1.00	8.99	B
ATOM 6844 NE1 TRP 104	51.554	32.503	65.919	1.00	8.99	B
ATOM 6845 HE1 TRP 104	52.180	32.796	66.623	1.00	0.00	B
ATOM 6846 CZ2 TRP 104	51.587	30.035	66.279	1.00	8.99	B
ATOM 6847 CZ3 TRP 104	50.158	28.849	64.732	1.00	8.99	B
ATOM 6848 CH2 TRP 104	51.054	28.865	65.798	1.00	8.99	B
ATOM 6849 C TRP 104	48.658	34.300	61.004	1.00	5.97	B
ATOM 6850 O TRP 104	48.605	35.455	60.565	1.00	8.99	B
ATOM 6851 N GLY 105	47.882	33.311	60.567	1.00	9.91	B
ATOM 6852 H GLY 105	48.021	32.408	60.915	1.00	0.00	B
ATOM 6853 CA GLY 105	46.833	33.567	59.593	1.00	9.91	B
ATOM 6854 C GLY 105	45.573	33.154	60.320	1.00	9.91	B
ATOM 6855 O GLY 105	45.715	32.556	61.378	1.00	16.85	B
ATOM 6856 N GLN 106	44.381	33.468	59.804	1.00	2.13	B
ATOM 6857 H GLN 106	44.345	33.977	58.965	1.00	0.00	B
ATOM 6858 CA GLN 106	43.137	33.047	60.470	1.00	2.13	B
ATOM 6859 CB GLN 106	41.862	33.475	59.740	1.00	31.71	B
ATOM 6860 CG GLN 106	40.717	32.383	59.859	1.00	31.71	B
ATOM 6861 CD GLN 106	39.618	32.638	60.977	1.00	31.71	B
ATOM 6862 OE1 GLN 106	39.937	32.846	62.167	1.00	31.71	B
ATOM 6863 NE2 GLN 106	38.328	32.591	60.564	1.00	31.71	B
ATOM 6864 HE21 GLN 106	37.615	32.391	61.214	1.00	0.00	B
ATOM 6865 HE22 GLN 106	38.154	32.755	59.614	1.00	0.00	B
ATOM 6866 C GLN 106	43.123	31.543	60.492	1.00	2.13	B
ATOM 6867 O GLN 106	42.534	30.939	61.372	1.00	31.71	B
ATOM 6868 N GLY 107	43.788	30.969	59.503	1.00	6.42	B
ATOM 6869 H GLY 107	44.230	31.524	58.825	1.00	0.00	B
ATOM 6870 CA GLY 107	43.870	29.540	59.394	1.00	6.42	B
ATOM 6871 C GLY 107	42.912	29.081	58.318	1.00	6.42	B
ATOM 6872 O GLY 107	41.975	29.827	57.990	1.00	17.26	B
ATOM 6873 N THR 108	43.155	27.890	57.759	1.00	2.31	B
ATOM 6874 H THR 108	43.933	27.375	58.050	1.00	0.00	B
ATOM 6875 CA THR 108	42.293	27.333	56.736	1.00	2.31	B
ATOM 6876 CB THR 108	43.036	27.117	55.438	1.00	8.00	B
ATOM 6877 OG1 THR 108	43.659	28.340	55.020	1.00	8.00	B
ATOM 6878 HG1 THR 108	44.013	28.808	55.786	1.00	0.00	B
ATOM 6879 CG2 THR 108	42.088	26.673	54.372	1.00	8.00	B
ATOM 6880 C THR 108	41.809	26.002	57.249	1.00	2.31	B
ATOM 6881 O THR 108	42.619	25.186	57.727	1.00	8.00	B
ATOM 6882 N LEU 109	40.484	25.779	57.207	1.00	30.96	B
ATOM 6883 H LEU 109	39.879	26.457	56.841	1.00	0.00	B
ATOM 6884 CA LEU 109	39.913	24.508	57.683	1.00	30.96	B
ATOM 6885 CB LEU 109	38.494	24.685	58.225	1.00	2.00	B



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ATOM	6886	CG	LEU	109	37.900	23.814	59.366	1.00	2.00	B
ATOM	6887	CD1	LEU	109	36.408	23.971	59.316	1.00	2.00	B
ATOM	6888	CD2	LEU	109	38.298	22.304	59.272	1.00	2.00	B
ATOM	6889	C	LEU	109	39.859	23.640	56.460	1.00	30.96	B
ATOM	6890	O	LEU	109	39.304	24.044	55.441	1.00	2.00	B
ATOM	6891	N	VAL	110	40.497	22.483	56.537	1.00	5.13	B
ATOM	6892	H	VAL	110	40.964	22.245	57.354	1.00	0.00	B
ATOM	6893	CA	VAL	110	40.517	21.544	55.431	1.00	5.13	B
ATOM	6894	CB	VAL	110	41.933	21.122	55.016	1.00	9.78	B
ATOM	6895	CG1	VAL	110	41.849	19.919	54.150	1.00	9.78	B
ATOM	6896	CG2	VAL	110	42.606	22.213	54.244	1.00	9.78	B
ATOM	6897	C	VAL	110	39.828	20.312	55.939	1.00	5.13	B
ATOM	6898	O	VAL	110	40.399	19.548	56.731	1.00	9.78	B
ATOM	6899	N	THR	111	38.599	20.114	55.498	1.00	26.68	B
ATOM	6900	H	THR	111	38.199	20.759	54.882	1.00	0.00	B
ATOM	6901	CA	THR	111	37.850	18.946	55.921	1.00	26.68	B
ATOM	6902	CB	THR	111	36.377	19.388	56.386	1.00	5.07	B
ATOM	6903	OG1	THR	111	35.378	18.505	55.879	1.00	5.07	B
ATOM	6904	HG1	THR	111	35.792	17.693	55.584	1.00	0.00	B
ATOM	6905	CG2	THR	111	36.064	20.830	55.912	1.00	5.07	B
ATOM	6906	C	THR	111	37.950	17.939	54.751	1.00	26.68	B
ATOM	6907	O	THR	111	37.702	18.263	53.569	1.00	5.07	B
ATOM	6908	N	VAL	112	38.398	16.733	55.081	1.00	6.87	B
ATOM	6909	H	VAL	112	38.596	16.511	56.016	1.00	0.00	B
ATOM	6910	CA	VAL	112	38.548	15.733	54.055	1.00	6.87	B
ATOM	6911	CB	VAL	112	39.735	14.765	54.326	1.00	24.37	B
ATOM	6912	CG1	VAL	112	39.607	13.540	53.466	1.00	24.37	B
ATOM	6913	CG2	VAL	112	41.040	15.444	54.059	1.00	24.37	B
ATOM	6914	C	VAL	112	37.315	14.874	54.019	1.00	6.87	B
ATOM	6915	O	VAL	112	37.121	14.061	54.944	1.00	24.37	B
ATOM	6916	N	SER	113	36.497	15.020	52.981	1.00	21.86	B
ATOM	6917	H	SER	113	36.663	15.689	52.301	1.00	0.00	B
ATOM	6918	CA	SER	113	35.332	14.146	52.887	1.00	21.86	B
ATOM	6919	CB	SER	113	34.112	14.698	53.637	1.00	24.81	B
ATOM	6920	OG	SER	113	32.974	13.876	53.391	1.00	24.81	B
ATOM	6921	HG	SER	113	32.294	14.015	54.067	1.00	0.00	B
ATOM	6922	C	SER	113	34.869	13.791	51.508	1.00	21.86	B
ATOM	6923	O	SER	113	35.093	14.529	50.538	1.00	24.81	B
ATOM	6924	N	SER	114	34.173	12.657	51.465	1.00	22.06	B
ATOM	6925	H	SER	114	34.047	12.157	52.301	1.00	0.00	B
ATOM	6926	CA	SER	114	33.599	12.124	50.244	1.00	22.06	B
ATOM	6927	CB	SER	114	33.462	10.606	50.377	1.00	36.44	B
ATOM	6928	OG	SER	114	33.545	10.269	51.748	1.00	36.44	B
ATOM	6929	HG	SER	114	34.439	10.416	52.067	1.00	0.00	B
ATOM	6930	C	SER	114	32.233	12.809	50.028	1.00	22.06	B
ATOM	6931	O	SER	114	31.537	12.470	49.097	1.00	36.44	B
ATOM	6932	N	ALA	115	31.886	13.870	50.801	1.00	36.89	B
ATOM	6933	H	ALA	115	32.533	13.995	51.453	1.00	0.00	B
ATOM	6934	CA	ALA	115	30.602	14.642	50.740	1.00	36.89	B
ATOM	6935	CB	ALA	115	30.185	15.011	52.126	1.00	7.04	B
ATOM	6936	C	ALA	115	30.623	15.914	49.894	1.00	36.89	B
ATOM	6937	O	ALA	115	31.690	16.391	49.474	1.00	7.04	B
ATOM	6938	N	SER	116	29.451	16.500	49.674	1.00	14.39	B
ATOM	6939	H	SER	116	28.636	16.130	50.064	1.00	0.00	B
ATOM	6940	CA	SER	116	29.403	17.686	48.838	1.00	14.39	B
ATOM	6941	CB	SER	116	28.402	17.484	47.694	1.00	24.13	B

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ATOM	6942	OG	SER	116	27.295	16.695	48.092	1.00	24.13	B
ATOM	6943	HG	SER	116	26.751	17.221	48.692	1.00	0.00	B
ATOM	6944	C	SER	116	29.164	19.037	49.465	1.00	14.39	B
ATOM	6945	O	SER	116	28.369	19.210	50.377	1.00	24.13	B
ATOM	6946	N	THR	117	29.869	20.017	48.924	1.00	20.82	B
ATOM	6947	H	THR	117	30.504	19.802	48.206	1.00	0.00	B
ATOM	6948	CA	THR	117	29.715	21.389	49.362	1.00	20.82	B
ATOM	6949	CB	THR	117	30.536	22.330	48.502	1.00	26.59	B
ATOM	6950	OG1	THR	117	31.872	21.819	48.394	1.00	26.59	B
ATOM	6951	HG1	THR	117	31.926	21.204	47.663	1.00	0.00	B
ATOM	6952	CG2	THR	117	30.539	23.716	49.103	1.00	26.59	B
ATOM	6953	C	THR	117	28.303	21.847	49.210	1.00	20.82	B
ATOM	6954	O	THR	117	27.696	21.625	48.179	1.00	26.59	B
ATOM	6955	N	LYS	118	27.764	22.461	50.242	1.00	9.14	B
ATOM	6956	H	LYS	118	28.250	22.538	51.084	1.00	0.00	B
ATOM	6957	CA	LYS	118	26.426	23.035	50.152	1.00	9.14	B
ATOM	6958	CB	LYS	118	25.328	22.169	50.717	1.00	29.71	B
ATOM	6959	CG	LYS	118	23.999	22.641	50.139	1.00	29.71	B
ATOM	6960	CD	LYS	118	22.816	22.337	51.036	1.00	29.71	B
ATOM	6961	CE	LYS	118	21.534	22.193	50.227	1.00	29.71	B
ATOM	6962	NZ	LYS	118	21.115	23.483	49.631	1.00	29.71	B
ATOM	6963	HZ1	LYS	118	21.571	24.283	50.125	1.00	0.00	B
ATOM	6964	HZ2	LYS	118	20.080	23.561	49.739	1.00	0.00	B
ATOM	6965	HZ3	LYS	118	21.342	23.489	48.622	1.00	0.00	B
ATOM	6966	C	LYS	118	26.422	24.295	50.909	1.00	9.14	B
ATOM	6967	O	LYS	118	27.061	24.398	51.932	1.00	29.71	B
ATOM	6968	N	GLY	119	25.716	25.264	50.379	1.00	18.88	B
ATOM	6969	H	GLY	119	25.233	25.122	49.542	1.00	0.00	B
ATOM	6970	CA	GLY	119	25.644	26.543	51.017	1.00	18.88	B
ATOM	6971	C	GLY	119	24.431	26.549	51.903	1.00	18.88	B
ATOM	6972	O	GLY	119	23.439	25.882	51.614	1.00	29.50	B
ATOM	6973	N	PRO	120	24.485	27.317	52.996	1.00	17.84	B
ATOM	6974	CD	PRO	120	25.629	28.170	53.386	1.00	2.08	B
ATOM	6975	CA	PRO	120	23.396	27.440	53.953	1.00	17.84	B
ATOM	6976	CB	PRO	120	24.081	28.052	55.128	1.00	2.08	B
ATOM	6977	CG	PRO	120	25.018	29.047	54.436	1.00	2.08	B
ATOM	6978	C	PRO	120	22.328	28.401	53.477	1.00	17.84	B
ATOM	6979	O	PRO	120	22.615	29.283	52.726	1.00	2.08	B
ATOM	6980	N	SER	121	21.093	28.224	53.926	1.00	18.38	B
ATOM	6981	H	SER	121	20.882	27.434	54.452	1.00	0.00	B
ATOM	6982	CA	SER	121	20.057	29.208	53.637	1.00	18.38	B
ATOM	6983	CB	SER	121	18.680	28.608	53.711	1.00	20.74	B
ATOM	6984	OG	SER	121	18.681	27.341	53.099	1.00	20.74	B
ATOM	6985	HG	SER	121	17.915	27.295	52.501	1.00	0.00	B
ATOM	6986	C	SER	121	20.246	30.084	54.857	1.00	18.38	B
ATOM	6987	O	SER	121	20.732	29.594	55.873	1.00	20.74	B
ATOM	6988	N	VAL	122	19.904	31.363	54.788	1.00	20.55	B
ATOM	6989	H	VAL	122	19.545	31.728	53.950	1.00	0.00	B
ATOM	6990	CA	VAL	122	20.083	32.203	55.962	1.00	20.55	B
ATOM	6991	CB	VAL	122	21.110	33.320	55.697	1.00	2.00	B
ATOM	6992	CG1	VAL	122	21.447	34.021	56.965	1.00	2.00	B
ATOM	6993	CG2	VAL	122	22.353	32.756	55.140	1.00	2.00	B
ATOM	6994	C	VAL	122	18.757	32.817	56.401	1.00	20.55	B
ATOM	6995	O	VAL	122	18.157	33.538	55.640	1.00	2.00	B
ATOM	6996	N	PHE	123	18.279	32.562	57.612	1.00	2.00	B
ATOM	6997	H	PHE	123	18.740	31.995	58.242	1.00	0.00	B

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ATOM	6998	CA	PHE	123	17.008	33.177	57.982	1.00	2.00	B
ATOM	6999	CB	PHE	123	16.037	32.092	58.427	1.00	7.76	B
ATOM	7000	CG	PHE	123	15.725	31.130	57.341	1.00	7.76	B
ATOM	7001	CD1	PHE	123	15.038	31.546	56.199	1.00	7.76	B
ATOM	7002	CD2	PHE	123	16.191	29.829	57.393	1.00	7.76	B
ATOM	7003	CE1	PHE	123	14.826	30.693	55.140	1.00	7.76	B
ATOM	7004	CE2	PHE	123	15.973	28.955	56.304	1.00	7.76	B
ATOM	7005	CZ	PHE	123	15.284	29.409	55.184	1.00	7.76	B
ATOM	7006	C	PHE	123	17.083	34.295	58.994	1.00	2.00	B
ATOM	7007	O	PHE	123	17.980	34.329	59.808	1.00	7.76	B
ATOM	7008	N	PRO	124	16.152	35.250	58.935	1.00	2.00	B
ATOM	7009	CD	PRO	124	15.007	35.406	58.048	1.00	15.53	B
ATOM	7010	CA	PRO	124	16.203	36.338	59.909	1.00	2.00	B
ATOM	7011	CB	PRO	124	15.226	37.364	59.359	1.00	15.53	B
ATOM	7012	CG	PRO	124	14.843	36.854	58.012	1.00	15.53	B
ATOM	7013	C	PRO	124	15.711	35.792	61.209	1.00	2.00	B
ATOM	7014	O	PRO	124	15.125	34.722	61.247	1.00	15.53	B
ATOM	7015	N	LEU	125	15.911	36.520	62.289	1.00	9.93	B
ATOM	7016	H	LEU	125	16.377	37.373	62.220	1.00	0.00	B
ATOM	7017	CA	LEU	125	15.434	36.043	63.577	1.00	9.93	B
ATOM	7018	CB	LEU	125	16.544	35.194	64.215	1.00	10.76	B
ATOM	7019	CG	LEU	125	16.355	33.895	65.023	1.00	10.76	B
ATOM	7020	CD1	LEU	125	16.114	32.666	64.169	1.00	10.76	B
ATOM	7021	CD2	LEU	125	17.622	33.642	65.783	1.00	10.76	B
ATOM	7022	C	LEU	125	15.027	37.230	64.463	1.00	9.93	B
ATOM	7023	O	LEU	125	15.885	37.862	65.003	1.00	10.76	B
ATOM	7024	N	GLY	126	13.721	37.557	64.503	1.00	13.86	B
ATOM	7025	H	GLY	126	13.120	37.084	63.893	1.00	0.00	B
ATOM	7026	CA	GLY	126	13.080	38.574	65.397	1.00	13.86	B
ATOM	7027	C	GLY	126	13.582	39.931	65.931	1.00	13.86	B
ATOM	7028	O	GLY	126	13.513	40.890	65.209	1.00	13.85	B
ATOM	7029	N	THR	127	14.064	40.076	67.172	1.00	44.28	B
ATOM	7030	H	THR	127	14.113	39.314	67.791	1.00	0.00	B
ATOM	7031	CA	THR	127	14.528	41.424	67.611	1.00	44.28	B
ATOM	7032	CB	THR	127	13.463	42.374	67.231	1.00	27.14	B
ATOM	7033	OG1	THR	127	12.292	41.607	66.878	1.00	27.14	B
ATOM	7034	HG1	THR	127	11.523	42.173	66.968	1.00	0.00	B
ATOM	7035	CG2	THR	127	13.924	43.208	66.049	1.00	27.14	B
ATOM	7036	C	THR	127	14.985	41.673	69.094	1.00	44.28	B
ATOM	7037	O	THR	127	14.729	40.786	69.932	1.00	27.14	B
ATOM	7038	N	ALA	128	15.595	42.862	69.396	1.00	22.09	B
ATOM	7039	H	ALA	128	15.633	43.523	68.681	1.00	0.00	B
ATOM	7040	CA	ALA	128	16.222	43.303	70.731	1.00	22.09	B
ATOM	7041	CB	ALA	128	15.238	43.606	71.782	1.00	2.00	B
ATOM	7042	C	ALA	128	17.208	42.244	71.221	1.00	22.09	B
ATOM	7043	O	ALA	128	18.150	42.496	71.919	1.00	2.00	B
ATOM	7044	N	ALA	129	16.887	41.029	70.877	1.00	4.06	B
ATOM	7045	H	ALA	129	16.035	40.880	70.541	1.00	0.00	B
ATOM	7046	CA	ALA	129	17.727	39.902	70.997	1.00	4.06	B
ATOM	7047	CB	ALA	129	17.145	38.822	71.852	1.00	2.00	B
ATOM	7048	C	ALA	129	17.347	39.643	69.540	1.00	4.06	B
ATOM	7049	O	ALA	129	16.182	39.602	69.230	1.00	2.00	B
ATOM	7050	N	LEU	130	18.278	39.549	68.616	1.00	2.00	B
ATOM	7051	H	LEU	130	19.220	39.691	68.816	1.00	0.00	B
ATOM	7052	CA	LEU	130	17.859	39.205	67.271	1.00	2.00	B
ATOM	7053	CB	LEU	130	17.439	40.445	66.469	1.00	3.28	B

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ATOM	7054	CG	LEU	130	18.265	41.738	66.481	1.00	3.28	B
ATOM	7055	CD1	LEU	130	19.175	41.721	65.282	1.00	3.28	B
ATOM	7056	CD2	LEU	130	17.376	42.988	66.487	1.00	3.28	B
ATOM	7057	C	LEU	130	18.979	38.397	66.589	1.00	2.00	B
ATOM	7058	O	LEU	130	19.986	38.055	67.229	1.00	3.28	B
ATOM	7059	N	GLY	131	18.798	38.057	65.307	1.00	2.00	B
ATOM	7060	H	GLY	131	17.977	38.317	64.841	1.00	0.00	B
ATOM	7061	CA	GLY	131	19.821	37.302	64.645	1.00	2.00	B
ATOM	7062	C	GLY	131	19.509	36.607	63.365	1.00	2.00	B
ATOM	7063	O	GLY	131	18.529	36.900	62.732	1.00	26.58	B
ATOM	7064	N	CYS	132	20.391	35.677	62.984	1.00	2.00	B
ATOM	7065	H	CYS	132	21.159	35.518	63.583	1.00	0.00	B
ATOM	7066	CA	CYS	132	20.294	34.899	61.761	1.00	2.00	B
ATOM	7067	C	CYS	132	20.489	33.431	62.021	1.00	2.00	B
ATOM	7068	O	CYS	132	21.357	32.992	62.778	1.00	18.41	B
ATOM	7069	CB	CYS	132	21.323	35.388	60.736	1.00	18.41	B
ATOM	7070	SG	CYS	132	20.972	37.099	60.232	1.00	18.41	B
ATOM	7071	N	LEU	133	19.634	32.653	61.393	1.00	7.85	B
ATOM	7072	H	LEU	133	18.928	33.050	60.842	1.00	0.00	B
ATOM	7073	CA	LEU	133	19.705	31.226	61.482	1.00	7.85	B
ATOM	7074	CB	LEU	133	18.313	30.664	61.597	1.00	2.00	B
ATOM	7075	CG	LEU	133	18.389	29.164	61.732	1.00	2.00	B
ATOM	7076	CD1	LEU	133	18.977	28.795	63.099	1.00	2.00	B
ATOM	7077	CD2	LEU	133	16.985	28.615	61.512	1.00	2.00	B
ATOM	7078	C	LEU	133	20.367	30.817	60.162	1.00	7.85	B
ATOM	7079	O	LEU	133	19.844	31.043	59.087	1.00	2.00	B
ATOM	7080	N	VAL	134	21.557	30.265	60.259	1.00	2.00	B
ATOM	7081	H	VAL	134	21.947	30.149	61.154	1.00	0.00	B
ATOM	7082	CA	VAL	134	22.305	29.836	59.104	1.00	2.00	B
ATOM	7083	CB	VAL	134	23.797	30.195	59.304	1.00	7.34	B
ATOM	7084	CG1	VAL	134	24.649	29.821	58.118	1.00	7.34	B
ATOM	7085	CG2	VAL	134	23.897	31.676	59.578	1.00	7.34	B
ATOM	7086	C	VAL	134	22.066	28.340	59.081	1.00	2.00	B
ATOM	7087	O	VAL	134	22.635	27.609	59.850	1.00	7.34	B
ATOM	7088	N	LYS	135	21.259	27.897	58.147	1.00	5.53	B
ATOM	7089	H	LYS	135	20.912	28.542	57.491	1.00	0.00	B
ATOM	7090	CA	LYS	135	20.875	26.510	58.046	1.00	5.53	B
ATOM	7091	CB	LYS	135	19.338	26.413	58.035	1.00	13.42	B
ATOM	7092	CG	LYS	135	18.796	25.251	58.759	1.00	13.42	B
ATOM	7093	CD	LYS	135	17.446	24.795	58.291	1.00	13.42	B
ATOM	7094	CE	LYS	135	17.167	23.368	58.897	1.00	13.42	B
ATOM	7095	NZ	LYS	135	16.177	22.405	58.199	1.00	13.42	B
ATOM	7096	HZ1	LYS	135	16.647	21.478	58.146	1.00	0.00	B
ATOM	7097	HZ2	LYS	135	15.994	22.759	57.237	1.00	0.00	B
ATOM	7098	HZ3	LYS	135	15.297	22.341	58.731	1.00	0.00	B
ATOM	7099	C	LYS	135	21.379	25.693	56.873	1.00	5.53	B
ATOM	7100	O	LYS	135	21.537	26.190	55.735	1.00	13.42	B
ATOM	7101	N	ASP	136	21.547	24.396	57.183	1.00	8.01	B
ATOM	7102	H	ASP	136	21.374	24.141	58.110	1.00	0.00	B
ATOM	7103	CA	ASP	136	21.963	23.340	56.237	1.00	8.01	B
ATOM	7104	CB	ASP	136	20.752	22.843	55.454	1.00	5.21	B
ATOM	7105	CG	ASP	136	19.597	22.389	56.342	1.00	5.21	B
ATOM	7106	OD1	ASP	136	19.786	22.093	57.528	1.00	5.21	B
ATOM	7107	OD2	ASP	136	18.471	22.316	55.835	1.00	5.21	B
ATOM	7108	C	ASP	136	23.111	23.590	55.252	1.00	8.01	B
ATOM	7109	O	ASP	136	22.913	23.807	54.052	1.00	5.21	B

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ATOM	7110	N	TYR	137	24.329	23.513	55.774	1.00	20.27	B
ATOM	7111	H	TYR	137	24.437	23.318	56.724	1.00	0.00	B
ATOM	7112	CA	TYR	137	25.500	23.716	54.955	1.00	20.27	B
ATOM	7113	CB	TYR	137	26.008	25.119	55.107	1.00	8.77	B
ATOM	7114	CG	TYR	137	26.459	25.355	56.509	1.00	8.77	B
ATOM	7115	CD1	TYR	137	27.789	25.271	56.863	1.00	8.77	B
ATOM	7116	CE1	TYR	137	28.178	25.502	58.150	1.00	8.77	B
ATOM	7117	CD2	TYR	137	25.536	25.676	57.478	1.00	8.77	B
ATOM	7118	CE2	TYR	137	25.902	25.907	58.736	1.00	8.77	B
ATOM	7119	CZ	TYR	137	27.220	25.823	59.085	1.00	8.77	B
ATOM	7120	OH	TYR	137	27.540	26.032	60.401	1.00	8.77	B
ATOM	7121	HH	TYR	137	26.886	25.589	60.941	1.00	0.00	B
ATOM	7122	C	TYR	137	26.590	22.786	55.401	1.00	20.27	B
ATOM	7123	O	TYR	137	26.601	22.343	56.526	1.00	8.77	B
ATOM	7124	N	PHE	138	27.530	22.558	54.497	1.00	2.00	B
ATOM	7125	H	PHE	138	27.452	23.014	53.628	1.00	0.00	B
ATOM	7126	CA	PHE	138	28.646	21.691	54.724	1.00	2.00	B
ATOM	7127	CB	PHE	138	28.230	20.269	54.431	1.00	9.84	B
ATOM	7128	CG	PHE	138	29.303	19.257	54.676	1.00	9.84	B
ATOM	7129	CD1	PHE	138	30.344	19.084	53.746	1.00	9.84	B
ATOM	7130	CD2	PHE	138	29.279	18.466	55.829	1.00	9.84	B
ATOM	7131	CE1	PHE	138	31.359	18.128	53.965	1.00	9.84	B
ATOM	7132	CE2	PHE	138	30.253	17.528	56.071	1.00	9.84	B
ATOM	7133	CZ	PHE	138	31.312	17.339	55.149	1.00	9.84	B
ATOM	7134	C	PHE	138	29.724	22.091	53.759	1.00	2.00	B
ATOM	7135	O	PHE	138	29.453	22.592	52.677	1.00	9.84	B
ATOM	7136	N	PRO	139	30.969	21.985	54.178	1.00	8.21	B
ATOM	7137	CD	PRO	139	32.199	22.288	53.426	1.00	3.51	B
ATOM	7138	CA	PRO	139	31.269	21.526	55.513	1.00	8.21	B
ATOM	7139	CB	PRO	139	32.604	20.803	55.331	1.00	3.51	B
ATOM	7140	CG	PRO	139	33.299	21.643	54.277	1.00	3.51	B
ATOM	7141	C	PRO	139	31.399	22.869	56.252	1.00	8.21	B
ATOM	7142	O	PRO	139	30.724	23.845	55.901	1.00	3.51	B
ATOM	7143	N	GLU	140	32.281	22.913	57.239	1.00	7.64	B
ATOM	7144	H	GLU	140	32.814	22.120	57.445	1.00	0.00	B
ATOM	7145	CA	GLU	140	32.486	24.108	58.028	1.00	7.64	B
ATOM	7146	CB	GLU	140	32.834	23.721	59.466	1.00	2.74	B
ATOM	7147	CG	GLU	140	31.685	23.156	60.290	1.00	2.74	B
ATOM	7148	CD	GLU	140	31.959	23.311	61.780	1.00	2.74	B
ATOM	7149	OE1	GLU	140	31.915	22.297	62.515	1.00	2.74	B
ATOM	7150	OE2	GLU	140	32.228	24.458	62.204	1.00	2.74	B
ATOM	7151	C	GLU	140	33.602	24.962	57.465	1.00	7.64	B
ATOM	7152	O	GLU	140	34.419	24.522	56.678	1.00	2.74	B
ATOM	7153	N	PRO	141	33.673	26.202	57.894	1.00	2.05	B
ATOM	7154	CD	PRO	141	34.866	27.019	57.635	1.00	5.16	B
ATOM	7155	CA	PRO	141	32.831	26.870	58.825	1.00	2.05	B
ATOM	7156	CB	PRO	141	33.834	27.502	59.746	1.00	5.16	B
ATOM	7157	CG	PRO	141	34.894	27.929	58.863	1.00	5.16	B
ATOM	7158	C	PRO	141	32.053	27.923	58.106	1.00	2.05	B
ATOM	7159	O	PRO	141	32.410	28.346	57.009	1.00	5.16	B
ATOM	7160	N	VAL	142	30.990	28.385	58.761	1.00	6.80	B
ATOM	7161	H	VAL	142	30.770	27.969	59.619	1.00	0.00	B
ATOM	7162	CA	VAL	142	30.146	29.466	58.277	1.00	6.80	B
ATOM	7163	CB	VAL	142	28.679	29.217	58.620	1.00	2.00	B
ATOM	7164	CG1	VAL	142	28.080	30.421	59.275	1.00	2.00	B
ATOM	7165	CG2	VAL	142	27.901	28.908	57.415	1.00	2.00	B

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ATOM	7166	C	VAL	142	30.682	30.589	59.170	1.00	6.80	B
ATOM	7167	O	VAL	142	30.937	30.392	60.333	1.00	2.00	B
ATOM	7168	N	THR	143	30.909	31.760	58.622	1.00	14.83	B
ATOM	7169	H	THR	143	30.779	31.918	57.677	1.00	0.00	B
ATOM	7170	CA	THR	143	31.363	32.826	59.445	1.00	14.83	B
ATOM	7171	CB	THR	143	32.603	33.433	58.888	1.00	11.78	B
ATOM	7172	OG1	THR	143	33.381	33.956	59.966	1.00	11.78	B
ATOM	7173	HG1	THR	143	33.991	34.606	59.625	1.00	0.00	B
ATOM	7174	CG2	THR	143	32.264	34.518	57.925	1.00	11.78	B
ATOM	7175	C	THR	143	30.212	33.819	59.514	1.00	14.83	B
ATOM	7176	O	THR	143	29.356	33.873	58.628	1.00	11.78	B
ATOM	7177	N	VAL	144	30.152	34.592	60.591	1.00	2.00	B
ATOM	7178	H	VAL	144	30.853	34.530	61.280	1.00	0.00	B
ATOM	7179	CA	VAL	144	29.068	35.517	60.716	1.00	2.00	B
ATOM	7180	CB	VAL	144	27.948	34.940	61.571	1.00	4.75	B
ATOM	7181	CG1	VAL	144	26.785	35.939	61.653	1.00	4.75	B
ATOM	7182	CG2	VAL	144	27.482	33.645	61.004	1.00	4.75	B
ATOM	7183	C	VAL	144	29.466	36.852	61.295	1.00	2.00	B
ATOM	7184	O	VAL	144	29.986	36.955	62.399	1.00	4.75	B
ATOM	7185	N	SER	145	29.188	37.890	60.529	1.00	10.89	B
ATOM	7186	H	SER	145	28.792	37.753	59.650	1.00	0.00	B
ATOM	7187	CA	SER	145	29.460	39.229	60.946	1.00	10.89	B
ATOM	7188	CB	SER	145	30.297	39.875	59.915	1.00	2.88	B
ATOM	7189	OG	SER	145	31.139	40.695	60.624	1.00	2.88	B
ATOM	7190	HG	SER	145	31.074	40.510	61.558	1.00	0.00	B
ATOM	7191	C	SER	145	28.198	40.029	61.082	1.00	10.89	B
ATOM	7192	O	SER	145	27.189	39.684	60.464	1.00	2.88	B
ATOM	7193	N	TRP	146	28.258	41.092	61.889	1.00	4.85	B
ATOM	7194	H	TRP	146	29.073	41.256	62.381	1.00	0.00	B
ATOM	7195	CA	TRP	146	27.107	42.016	62.054	1.00	4.85	B
ATOM	7196	CB	TRP	146	26.523	41.965	63.472	1.00	3.78	B
ATOM	7197	CG	TRP	146	25.759	40.747	63.777	1.00	3.78	B
ATOM	7198	CD2	TRP	146	24.397	40.471	63.461	1.00	3.78	B
ATOM	7199	CE2	TRP	146	24.131	39.159	63.900	1.00	3.78	B
ATOM	7200	CE3	TRP	146	23.374	41.194	62.850	1.00	3.78	B
ATOM	7201	CD1	TRP	146	26.245	39.648	64.373	1.00	3.78	B
ATOM	7202	NE1	TRP	146	25.290	38.689	64.453	1.00	3.78	B
ATOM	7203	HE1	TRP	146	25.396	37.791	64.849	1.00	0.00	B
ATOM	7204	CZ2	TRP	146	22.866	38.535	63.751	1.00	3.78	B
ATOM	7205	CZ3	TRP	146	22.116	40.582	62.698	1.00	3.78	B
ATOM	7206	CH2	TRP	146	21.882	39.258	63.149	1.00	3.78	B
ATOM	7207	C	TRP	146	27.445	43.478	61.687	1.00	4.85	B
ATOM	7208	O	TRP	146	28.318	44.112	62.297	1.00	3.78	B
ATOM	7209	N	ASN	147	26.738	43.989	60.678	1.00	2.00	B
ATOM	7210	H	ASN	147	26.065	43.410	60.259	1.00	0.00	B
ATOM	7211	CA	ASN	147	26.901	45.354	60.145	1.00	2.00	B
ATOM	7212	CB	ASN	147	26.448	46.407	61.154	1.00	4.90	B
ATOM	7213	CG	ASN	147	24.933	46.495	61.231	1.00	4.90	B
ATOM	7214	OD1	ASN	147	24.253	46.017	60.360	1.00	4.90	B
ATOM	7215	ND2	ASN	147	24.415	47.071	62.262	1.00	4.90	B
ATOM	7216	HD21	ASN	147	24.941	47.729	62.747	1.00	0.00	B
ATOM	7217	HD22	ASN	147	23.504	46.817	62.516	1.00	0.00	B
ATOM	7218	C	ASN	147	28.318	45.564	59.728	1.00	2.00	B
ATOM	7219	O	ASN	147	28.959	46.562	60.025	1.00	4.90	B
ATOM	7220	N	SER	148	28.813	44.550	59.043	1.00	12.28	B
ATOM	7221	H	SER	148	28.225	43.780	58.872	1.00	0.00	B

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ATOM	7222	CA	SER	148	30.156	44.539	58.537	1.00	12.28	B
ATOM	7223	CB	SER	148	30.281	45.634	57.515	1.00	25.76	B
ATOM	7224	OG	SER	148	29.241	45.503	56.568	1.00	25.76	B
ATOM	7225	HG	SER	148	28.519	44.986	56.922	1.00	0.00	B
ATOM	7226	C	SER	148	31.203	44.664	59.625	1.00	12.28	B
ATOM	7227	O	SER	148	32.284	45.205	59.411	1.00	25.76	B
ATOM	7228	N	GLY	149	30.881	44.164	60.812	1.00	3.90	B
ATOM	7229	H	GLY	149	30.002	43.760	60.973	1.00	0.00	B
ATOM	7230	CA	GLY	149	31.861	44.194	61.874	1.00	3.90	B
ATOM	7231	C	GLY	149	31.893	45.410	62.744	1.00	3.90	B
ATOM	7232	O	GLY	149	32.712	45.509	63.663	1.00	23.33	B
ATOM	7233	N	ALA	150	31.021	46.354	62.460	1.00	21.37	B
ATOM	7234	H	ALA	150	30.398	46.250	61.707	1.00	0.00	B
ATOM	7235	CA	ALA	150	30.996	47.556	63.267	1.00	21.37	B
ATOM	7236	CB	ALA	150	30.349	48.713	62.473	1.00	14.83	B
ATOM	7237	C	ALA	150	30.193	47.245	64.521	1.00	21.37	B
ATOM	7238	O	ALA	150	30.107	48.068	65.431	1.00	14.83	B
ATOM	7239	N	LEU	151	29.583	46.063	64.539	1.00	10.58	B
ATOM	7240	H	LEU	151	29.710	45.462	63.782	1.00	0.00	B
ATOM	7241	CA	LEU	151	28.746	45.634	65.648	1.00	10.58	B
ATOM	7242	CB	LEU	151	27.258	45.543	65.197	1.00	3.63	B
ATOM	7243	CG	LEU	151	26.293	44.716	66.086	1.00	3.63	B
ATOM	7244	CD1	LEU	151	26.458	45.252	67.452	1.00	3.63	B
ATOM	7245	CD2	LEU	151	24.807	44.766	65.673	1.00	3.63	B
ATOM	7246	C	LEU	151	29.276	44.286	66.120	1.00	10.58	B
ATOM	7247	O	LEU	151	29.239	43.298	65.412	1.00	3.63	B
ATOM	7248	N	THR	152	29.805	44.270	67.328	1.00	15.84	B
ATOM	7249	H	THR	152	29.834	45.105	67.849	1.00	0.00	B
ATOM	7250	CA	THR	152	30.354	43.041	67.896	1.00	15.84	B
ATOM	7251	CB	THR	152	31.909	43.015	67.731	1.00	2.00	B
ATOM	7252	OG1	THR	152	32.522	43.985	68.579	1.00	2.00	B
ATOM	7253	HG1	THR	152	32.402	44.871	68.237	1.00	0.00	B
ATOM	7254	CG2	THR	152	32.268	43.347	66.286	1.00	2.00	B
ATOM	7255	C	THR	152	29.948	42.906	69.350	1.00	15.84	B
ATOM	7256	O	THR	152	29.829	41.811	69.875	1.00	2.00	B
ATOM	7257	N	SER	153	29.718	44.035	70.009	1.00	5.20	B
ATOM	7258	H	SER	153	29.852	44.898	69.572	1.00	0.00	B
ATOM	7259	CA	SER	153	29.289	43.970	71.380	1.00	5.20	B
ATOM	7260	CB	SER	153	29.186	45.358	71.981	1.00	4.01	B
ATOM	7261	OG	SER	153	29.734	45.392	73.283	1.00	4.01	B
ATOM	7262	HG	SER	153	29.931	46.299	73.543	1.00	0.00	B
ATOM	7263	C	SER	153	27.948	43.282	71.389	1.00	5.20	B
ATOM	7264	O	SER	153	27.114	43.552	70.551	1.00	4.01	B
ATOM	7265	N	GLY	154	27.780	42.377	72.343	1.00	9.71	B
ATOM	7266	H	GLY	154	28.516	42.225	72.979	1.00	0.00	B
ATOM	7267	CA	GLY	154	26.565	41.622	72.476	1.00	9.71	B
ATOM	7268	C	GLY	154	26.349	40.476	71.490	1.00	9.71	B
ATOM	7269	O	GLY	154	25.270	39.827	71.444	1.00	9.16	B
ATOM	7270	N	VAL	155	27.363	40.171	70.700	1.00	2.00	B
ATOM	7271	H	VAL	155	28.228	40.627	70.762	1.00	0.00	B
ATOM	7272	CA	VAL	155	27.121	39.119	69.772	1.00	2.00	B
ATOM	7273	CB	VAL	155	27.830	39.429	68.489	1.00	2.00	B
ATOM	7274	CG1	VAL	155	27.766	38.234	67.540	1.00	2.00	B
ATOM	7275	CG2	VAL	155	27.211	40.610	67.891	1.00	2.00	B
ATOM	7276	C	VAL	155	27.474	37.709	70.254	1.00	2.00	B
ATOM	7277	O	VAL	155	28.416	37.494	71.027	1.00	2.00	B

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ATOM	7278	N	HIS	156	26.681	36.742	69.827	1.00	2.14	B
ATOM	7279	H	HIS	156	25.893	36.951	69.294	1.00	0.00	B
ATOM	7280	CA	HIS	156	26.969	35.362	70.162	1.00	2.14	B
ATOM	7281	CB	HIS	156	26.028	34.808	71.202	1.00	7.91	B
ATOM	7282	CG	HIS	156	26.251	35.364	72.550	1.00	7.91	B
ATOM	7283	CD2	HIS	156	25.385	35.691	73.527	1.00	7.91	B
ATOM	7284	ND1	HIS	156	27.494	35.735	72.986	1.00	7.91	B
ATOM	7285	HD1	HIS	156	28.332	35.618	72.501	1.00	0.00	B
ATOM	7286	CE1	HIS	156	27.386	36.280	74.180	1.00	7.91	B
ATOM	7287	NE2	HIS	156	26.117	36.261	74.531	1.00	7.91	B
ATOM	7288	HE2	HIS	156	25.746	36.594	75.381	1.00	0.00	B
ATOM	7289	C	HIS	156	26.745	34.541	68.930	1.00	2.14	B
ATOM	7290	O	HIS	156	25.600	34.395	68.475	1.00	7.91	B
ATOM	7291	N	THR	157	27.817	34.051	68.315	1.00	4.68	B
ATOM	7292	H	THR	157	28.732	34.278	68.585	1.00	0.00	B
ATOM	7293	CA	THR	157	27.539	33.180	67.219	1.00	4.68	B
ATOM	7294	CB	THR	157	28.174	33.573	65.809	1.00	2.00	B
ATOM	7295	OG1	THR	157	28.922	32.474	65.297	1.00	2.00	B
ATOM	7296	HG1	THR	157	28.390	31.685	65.355	1.00	0.00	B
ATOM	7297	CG2	THR	157	28.955	34.858	65.852	1.00	2.00	B
ATOM	7298	C	THR	157	27.941	31.837	67.752	1.00	4.68	B
ATOM	7299	O	THR	157	29.007	31.606	68.260	1.00	2.00	B
ATOM	7300	N	PHE	158	26.966	30.970	67.701	1.00	2.25	B
ATOM	7301	H	PHE	158	26.121	31.252	67.305	1.00	0.00	B
ATOM	7302	CA	PHE	158	27.075	29.630	68.197	1.00	2.25	B
ATOM	7303	CB	PHE	158	25.662	29.062	68.373	1.00	14.53	B
ATOM	7304	CG	PHE	158	24.843	29.811	69.371	1.00	14.53	B
ATOM	7305	CD1	PHE	158	23.977	30.806	68.953	1.00	14.53	B
ATOM	7306	CD2	PHE	158	25.054	29.611	70.748	1.00	14.53	B
ATOM	7307	CE1	PHE	158	23.351	31.609	69.877	1.00	14.53	B
ATOM	7308	CE2	PHE	158	24.439	30.403	71.691	1.00	14.53	B
ATOM	7309	CZ	PHE	158	23.587	31.417	71.272	1.00	14.53	B
ATOM	7310	C	PHE	158	27.881	28.591	67.484	1.00	2.25	B
ATOM	7311	O	PHE	158	28.109	28.639	66.300	1.00	14.53	B
ATOM	7312	N	PRO	159	28.438	27.704	68.268	1.00	2.00	B
ATOM	7313	CD	PRO	159	28.578	27.743	69.730	1.00	2.00	B
ATOM	7314	CA	PRO	159	29.196	26.623	67.689	1.00	2.00	B
ATOM	7315	CB	PRO	159	29.655	25.848	68.914	1.00	2.00	B
ATOM	7316	CG	PRO	159	29.798	26.920	69.915	1.00	2.00	B
ATOM	7317	C	PRO	159	28.125	25.902	66.816	1.00	2.00	B
ATOM	7318	O	PRO	159	26.945	25.909	67.125	1.00	2.00	B
ATOM	7319	N	ALA	160	28.527	25.331	65.685	1.00	2.00	B
ATOM	7320	H	ALA	160	29.475	25.344	65.437	1.00	0.00	B
ATOM	7321	CA	ALA	160	27.562	24.716	64.810	1.00	2.00	B
ATOM	7322	CB	ALA	160	28.124	24.544	63.442	1.00	14.12	B
ATOM	7323	C	ALA	160	27.134	23.426	65.345	1.00	2.00	B
ATOM	7324	O	ALA	160	27.822	22.781	66.131	1.00	14.12	B
ATOM	7325	N	VAL	161	25.983	23.017	64.866	1.00	2.28	B
ATOM	7326	H	VAL	161	25.506	23.550	64.210	1.00	0.00	B
ATOM	7327	CA	VAL	161	25.386	21.778	65.318	1.00	2.28	B
ATOM	7328	CB	VAL	161	24.066	22.122	66.073	1.00	9.41	B
ATOM	7329	CG1	VAL	161	22.981	21.212	65.693	1.00	9.41	B
ATOM	7330	CG2	VAL	161	24.333	22.142	67.563	1.00	9.41	B
ATOM	7331	C	VAL	161	25.201	20.949	64.088	1.00	2.28	B
ATOM	7332	O	VAL	161	24.817	21.440	63.048	1.00	9.41	B
ATOM	7333	N	LEU	162	25.529	19.682	64.217	1.00	27.66	B



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ATOM	7334	H	LEU	162	25.821	19.356	65.095	1.00	0.00	B
ATOM	7335	CA	LEU	162	25.484	18.747	63.108	1.00	27.66	B
ATOM	7336	CB	LEU	162	26.666	17.813	63.245	1.00	12.77	B
ATOM	7337	CG	LEU	162	26.751	16.570	62.416	1.00	12.77	B
ATOM	7338	CD1	LEU	162	27.327	16.961	61.067	1.00	12.77	B
ATOM	7339	CD2	LEU	162	27.623	15.531	63.129	1.00	12.77	B
ATOM	7340	C	LEU	162	24.190	17.961	63.014	1.00	27.66	B
ATOM	7341	O	LEU	162	23.868	17.121	63.858	1.00	12.77	B
ATOM	7342	N	GLN	163	23.447	18.247	61.956	1.00	25.84	B
ATOM	7343	H	GLN	163	23.762	18.925	61.323	1.00	0.00	B
ATOM	7344	CA	GLN	163	22.181	17.586	61.706	1.00	25.84	B
ATOM	7345	CB	GLN	163	21.382	18.415	60.740	1.00	31.72	B
ATOM	7346	CG	GLN	163	21.319	19.832	61.184	1.00	31.72	B
ATOM	7347	CD	GLN	163	20.718	20.693	60.146	1.00	31.72	B
ATOM	7348	OE1	GLN	163	19.526	21.006	60.213	1.00	31.72	B
ATOM	7349	NE2	GLN	163	21.528	21.085	59.150	1.00	31.72	B
ATOM	7350	HE21	GLN	163	21.779	22.039	59.099	1.00	0.00	B
ATOM	7351	HE22	GLN	163	21.847	20.420	58.505	1.00	0.00	B
ATOM	7352	C	GLN	163	22.319	16.176	61.178	1.00	25.84	B
ATOM	7353	O	GLN	163	23.282	15.817	60.497	1.00	31.72	B
ATOM	7354	N	SER	164	21.335	15.377	61.517	1.00	12.95	B
ATOM	7355	H	SER	164	20.597	15.725	62.068	1.00	0.00	B
ATOM	7356	CA	SER	164	21.306	13.996	61.110	1.00	12.95	B
ATOM	7357	CB	SER	164	19.932	13.443	61.374	1.00	22.01	B
ATOM	7358	OG	SER	164	19.027	14.210	60.603	1.00	22.01	B
ATOM	7359	HG	SER	164	18.151	14.175	61.006	1.00	0.00	B
ATOM	7360	C	SER	164	21.567	13.970	59.632	1.00	12.95	B
ATOM	7361	O	SER	164	22.270	13.106	59.137	1.00	22.01	B
ATOM	7362	N	SER	165	20.996	14.935	58.929	1.00	9.41	B
ATOM	7363	H	SER	165	20.450	15.612	59.372	1.00	0.00	B
ATOM	7364	CA	SER	165	21.174	15.022	57.499	1.00	9.41	B
ATOM	7365	CB	SER	165	20.582	16.303	57.018	1.00	23.45	B
ATOM	7366	OG	SER	165	21.578	17.291	57.109	1.00	23.45	B
ATOM	7367	HG	SER	165	21.366	17.992	56.484	1.00	0.00	B
ATOM	7368	C	SER	165	22.640	15.022	57.115	1.00	9.41	B
ATOM	7369	O	SER	165	22.981	14.837	55.948	1.00	23.45	B
ATOM	7370	N	GLY	166	23.498	15.260	58.100	1.00	7.58	B
ATOM	7371	H	GLY	166	23.107	15.385	58.976	1.00	0.00	B
ATOM	7372	CA	GLY	166	24.915	15.338	57.870	1.00	7.58	B
ATOM	7373	C	GLY	166	25.239	16.791	57.582	1.00	7.58	B
ATOM	7374	O	GLY	166	26.391	17.185	57.453	1.00	22.16	B
ATOM	7375	N	LEU	167	24.217	17.620	57.483	1.00	23.19	B
ATOM	7376	H	LEU	167	23.309	17.287	57.593	1.00	0.00	B
ATOM	7377	CA	LEU	167	24.480	19.015	57.218	1.00	23.19	B
ATOM	7378	CB	LEU	167	23.338	19.610	56.408	1.00	5.72	B
ATOM	7379	CG	LEU	167	23.250	19.194	54.929	1.00	5.72	B
ATOM	7380	CD1	LEU	167	22.156	20.048	54.277	1.00	5.72	B
ATOM	7381	CD2	LEU	167	24.566	19.390	54.196	1.00	5.72	B
ATOM	7382	C	LEU	167	24.692	19.764	58.532	1.00	23.19	B
ATOM	7383	O	LEU	167	24.435	19.237	59.609	1.00	5.72	B
ATOM	7384	N	TYR	168	25.182	20.986	58.424	1.00	25.04	B
ATOM	7385	H	TYR	168	25.338	21.346	57.528	1.00	0.00	B
ATOM	7386	CA	TYR	168	25.501	21.788	59.590	1.00	25.04	B
ATOM	7387	CB	TYR	168	26.905	22.338	59.448	1.00	4.14	B
ATOM	7388	CG	TYR	168	27.991	21.424	59.910	1.00	4.14	B
ATOM	7389	CD1	TYR	168	28.149	21.127	61.247	1.00	4.14	B

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ATOM	7390	CE1 TYR	168	29.118	20.258	61.638	1.00	4.14	B
ATOM	7391	CD2 TYR	168	28.850	20.831	58.995	1.00	4.14	B
ATOM	7392	CE2 TYR	168	29.805	19.982	59.384	1.00	4.14	B
ATOM	7393	CZ TYR	168	29.935	19.693	60.695	1.00	4.14	B
ATOM	7394	OH TYR	168	30.882	18.826	61.090	1.00	4.14	B
ATOM	7395	HH TYR	168	30.561	17.925	60.954	1.00	0.00	B
ATOM	7396	C TYR	168	24.555	22.953	59.739	1.00	25.04	B
ATOM	7397	O TYR	168	23.932	23.384	58.767	1.00	4.14	B
ATOM	7398	N SER	169	24.498	23.503	60.944	1.00	2.06	B
ATOM	7399	H SER	169	25.074	23.143	61.662	1.00	0.00	B
ATOM	7400	CA SER	169	23.605	24.620	61.210	1.00	2.06	B
ATOM	7401	CB SER	169	22.278	24.081	61.630	1.00	5.99	B
ATOM	7402	OG SER	169	21.304	24.510	60.766	1.00	5.99	B
ATOM	7403	HG SER	169	20.443	24.402	61.186	1.00	0.00	B
ATOM	7404	C SER	169	24.109	25.457	62.342	1.00	2.06	B
ATOM	7405	O SER	169	24.626	24.940	63.333	1.00	5.99	B
ATOM	7406	N LEU	170	24.012	26.763	62.212	1.00	21.37	B
ATOM	7407	H LEU	170	23.692	27.159	61.385	1.00	0.00	B
ATOM	7408	CA LEU	170	24.394	27.567	63.343	1.00	21.37	B
ATOM	7409	CB LEU	170	25.846	27.970	63.259	1.00	4.18	B
ATOM	7410	CG LEU	170	26.391	29.120	62.423	1.00	4.18	B
ATOM	7411	CD1 LEU	170	25.685	30.463	62.631	1.00	4.18	B
ATOM	7412	CD2 LEU	170	27.893	29.219	62.829	1.00	4.18	B
ATOM	7413	C LEU	170	23.481	28.766	63.567	1.00	21.37	B
ATOM	7414	O LEU	170	22.593	29.078	62.741	1.00	4.18	B
ATOM	7415	N SER	171	23.657	29.397	64.728	1.00	2.33	B
ATOM	7416	H SER	171	24.329	29.058	65.364	1.00	0.00	B
ATOM	7417	CA SER	171	22.875	30.548	65.029	1.00	2.33	B
ATOM	7418	CB SER	171	22.083	30.293	66.282	1.00	6.41	B
ATOM	7419	OG SER	171	20.717	30.307	65.999	1.00	6.41	B
ATOM	7420	HG SER	171	20.289	29.594	66.479	1.00	0.00	B
ATOM	7421	C SER	171	23.780	31.717	65.257	1.00	2.33	B
ATOM	7422	O SER	171	24.952	31.547	65.595	1.00	6.41	B
ATOM	7423	N SER	172	23.278	32.910	65.012	1.00	10.38	B
ATOM	7424	H SER	172	22.399	33.012	64.598	1.00	0.00	B
ATOM	7425	CA SER	172	24.069	34.068	65.396	1.00	10.38	B
ATOM	7426	CB SER	172	24.773	34.781	64.253	1.00	16.25	B
ATOM	7427	OG SER	172	25.591	35.785	64.836	1.00	16.25	B
ATOM	7428	HG SER	172	25.933	35.479	65.677	1.00	0.00	B
ATOM	7429	C SER	172	23.054	34.985	66.022	1.00	10.38	B
ATOM	7430	O SER	172	22.011	35.260	65.443	1.00	16.25	B
ATOM	7431	N VAL	173	23.370	35.462	67.210	1.00	13.78	B
ATOM	7432	H VAL	173	24.239	35.261	67.599	1.00	0.00	B
ATOM	7433	CA VAL	173	22.437	36.290	67.951	1.00	13.78	B
ATOM	7434	CB VAL	173	21.897	35.428	69.101	1.00	20.95	B
ATOM	7435	CG1 VAL	173	21.905	36.208	70.367	1.00	20.95	B
ATOM	7436	CG2 VAL	173	20.510	34.863	68.752	1.00	20.95	B
ATOM	7437	C VAL	173	23.087	37.562	68.496	1.00	13.78	B
ATOM	7438	O VAL	173	24.310	37.637	68.655	1.00	20.95	B
ATOM	7439	N VAL	174	22.288	38.581	68.768	1.00	9.76	B
ATOM	7440	H VAL	174	21.324	38.527	68.569	1.00	0.00	B
ATOM	7441	CA VAL	174	22.841	39.805	69.351	1.00	9.76	B
ATOM	7442	CB VAL	174	23.395	40.782	68.289	1.00	9.94	B
ATOM	7443	CG1 VAL	174	22.224	41.452	67.532	1.00	9.94	B
ATOM	7444	CG2 VAL	174	24.259	41.832	68.953	1.00	9.94	B
ATOM	7445	C VAL	174	21.756	40.515	70.124	1.00	9.76	B

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ATOM	7446	O	VAL	174	20.571	40.363	69.839	1.00	9.94	B
ATOM	7447	N	THR	175	22.177	41.305	71.101	1.00	24.29	B
ATOM	7448	H	THR	175	23.134	41.385	71.266	1.00	0.00	B
ATOM	7449	CA	THR	175	21.251	42.055	71.931	1.00	24.29	B
ATOM	7450	CB	THR	175	21.448	41.764	73.476	1.00	7.84	B
ATOM	7451	OG1	THR	175	22.786	41.293	73.741	1.00	7.84	B
ATOM	7452	HG1	THR	175	23.211	41.859	74.378	1.00	0.00	B
ATOM	7453	CG2	THR	175	20.417	40.759	73.963	1.00	7.84	B
ATOM	7454	C	THR	175	21.537	43.526	71.667	1.00	24.29	B
ATOM	7455	O	THR	175	22.690	43.911	71.499	1.00	7.84	B
ATOM	7456	N	VAL	176	20.482	44.332	71.664	1.00	9.64	B
ATOM	7457	H	VAL	176	19.606	43.934	71.849	1.00	0.00	B
ATOM	7458	CA	VAL	176	20.538	45.763	71.404	1.00	9.64	B
ATOM	7459	CB	VAL	176	20.302	46.032	69.876	1.00	3.24	B
ATOM	7460	CG1	VAL	176	21.009	45.040	69.038	1.00	3.24	B
ATOM	7461	CG2	VAL	176	18.848	45.907	69.557	1.00	3.24	B
ATOM	7462	C	VAL	176	19.380	46.447	72.191	1.00	9.64	B
ATOM	7463	O	VAL	176	18.524	45.795	72.742	1.00	3.24	B
ATOM	7464	N	PRO	177	19.374	47.785	72.270	1.00	2.00	B
ATOM	7465	CD	PRO	177	20.427	48.676	71.742	1.00	2.00	B
ATOM	7466	CA	PRO	177	18.327	48.547	72.955	1.00	2.00	B
ATOM	7467	CB	PRO	177	18.851	49.975	72.961	1.00	2.00	B
ATOM	7468	CG	PRO	177	20.222	49.906	72.540	1.00	2.00	B
ATOM	7469	C	PRO	177	17.062	48.500	72.138	1.00	2.00	B
ATOM	7470	O	PRO	177	17.064	48.711	70.937	1.00	2.00	B
ATOM	7471	N	SER	178	15.943	48.277	72.768	1.00	7.55	B
ATOM	7472	H	SER	178	15.955	48.128	73.732	1.00	0.00	B
ATOM	7473	CA	SER	178	14.737	48.288	71.983	1.00	7.55	B
ATOM	7474	CB	SER	178	13.675	47.671	72.806	1.00	3.98	B
ATOM	7475	OG	SER	178	14.184	47.748	74.086	1.00	3.98	B
ATOM	7476	HG	SER	178	14.481	48.662	74.250	1.00	0.00	B
ATOM	7477	C	SER	178	14.347	49.739	71.598	1.00	7.55	B
ATOM	7478	O	SER	178	13.600	49.939	70.669	1.00	3.98	B
ATOM	7479	N	SER	179	14.846	50.732	72.314	1.00	3.12	B
ATOM	7480	H	SER	179	15.449	50.521	73.074	1.00	0.00	B
ATOM	7481	CA	SER	179	14.525	52.088	72.009	1.00	3.12	B
ATOM	7482	CB	SER	179	15.308	53.076	72.879	1.00	32.08	B
ATOM	7483	OG	SER	179	16.516	52.550	73.390	1.00	32.08	B
ATOM	7484	HG	SER	179	16.604	51.635	73.136	1.00	0.00	B
ATOM	7485	C	SER	179	14.802	52.369	70.561	1.00	3.12	B
ATOM	7486	O	SER	179	14.031	53.069	69.913	1.00	32.08	B
ATOM	7487	N	SER	180	15.875	51.821	70.015	1.00	2.26	B
ATOM	7488	H	SER	180	16.463	51.252	70.541	1.00	0.00	B
ATOM	7489	CA	SER	180	16.163	52.086	68.630	1.00	2.26	B
ATOM	7490	CB	SER	180	17.647	52.442	68.456	1.00	25.98	B
ATOM	7491	OG	SER	180	18.455	51.859	69.463	1.00	25.98	B
ATOM	7492	HG	SER	180	19.099	52.508	69.761	1.00	0.00	B
ATOM	7493	C	SER	180	15.784	50.958	67.654	1.00	2.26	B
ATOM	7494	O	SER	180	16.212	50.941	66.505	1.00	25.98	B
ATOM	7495	N	LEU	181	15.007	49.995	68.080	1.00	9.99	B
ATOM	7496	H	LEU	181	14.703	49.972	69.009	1.00	0.00	B
ATOM	7497	CA	LEU	181	14.619	48.986	67.121	1.00	9.99	B
ATOM	7498	CB	LEU	181	13.582	48.071	67.692	1.00	13.82	B
ATOM	7499	CG	LEU	181	14.263	47.019	68.522	1.00	13.82	B
ATOM	7500	CD1	LEU	181	13.252	46.376	69.424	1.00	13.82	B
ATOM	7501	CD2	LEU	181	14.898	46.046	67.615	1.00	13.82	B

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ATOM	7502	C	LEU	181	14.001	49.837	66.042	1.00	9.99	B
ATOM	7503	O	LEU	181	13.472	50.919	66.340	1.00	13.82	B
ATOM	7504	N	GLY	182	14.068	49.400	64.791	1.00	41.01	B
ATOM	7505	H	GLY	182	14.469	48.521	64.599	1.00	0.00	B
ATOM	7506	CA	GLY	182	13.542	50.260	63.733	1.00	41.01	B
ATOM	7507	C	GLY	182	14.125	51.684	63.849	1.00	41.01	B
ATOM	7508	O	GLY	182	13.473	52.578	64.328	1.00	10.76	B
ATOM	7509	N	THR	183	15.383	51.862	63.438	1.00	27.85	B
ATOM	7510	H	THR	183	15.864	51.078	63.092	1.00	0.00	B
ATOM	7511	CA	THR	183	16.112	53.134	63.467	1.00	27.85	B
ATOM	7512	CB	THR	183	15.861	53.854	64.778	1.00	15.15	B
ATOM	7513	OG1	THR	183	15.320	55.136	64.472	1.00	15.15	B
ATOM	7514	HG1	THR	183	14.381	55.114	64.302	1.00	0.00	B
ATOM	7515	CG2	THR	183	17.127	54.021	65.615	1.00	15.15	B
ATOM	7516	C	THR	183	17.580	52.759	63.301	1.00	27.85	B
ATOM	7517	O	THR	183	18.350	53.379	62.611	1.00	15.15	B
ATOM	7518	N	GLN	184	17.965	51.699	63.952	1.00	9.22	B
ATOM	7519	H	GLN	184	17.340	51.218	64.531	1.00	0.00	B
ATOM	7520	CA	GLN	184	19.298	51.244	63.810	1.00	9.22	B
ATOM	7521	CB	GLN	184	19.813	50.807	65.164	1.00	14.31	B
ATOM	7522	CG	GLN	184	20.094	52.000	66.025	1.00	14.31	B
ATOM	7523	CD	GLN	184	20.722	53.141	65.213	1.00	14.31	B
ATOM	7524	OE1	GLN	184	21.953	53.251	65.089	1.00	14.31	B
ATOM	7525	NE2	GLN	184	19.876	53.979	64.652	1.00	14.31	B
ATOM	7526	HE21	GLN	184	19.350	54.560	65.243	1.00	0.00	B
ATOM	7527	HE22	GLN	184	19.806	53.982	63.675	1.00	0.00	B
ATOM	7528	C	GLN	184	19.064	50.086	62.883	1.00	9.22	B
ATOM	7529	O	GLN	184	17.951	49.579	62.822	1.00	14.31	B
ATOM	7530	N	THR	185	20.067	49.695	62.109	1.00	5.31	B
ATOM	7531	H	THR	185	20.932	50.134	62.117	1.00	0.00	B
ATOM	7532	CA	THR	185	19.818	48.576	61.243	1.00	5.31	B
ATOM	7533	CB	THR	185	19.548	49.019	59.755	1.00	21.65	B
ATOM	7534	OG1	THR	185	20.639	49.771	59.259	1.00	21.65	B
ATOM	7535	HG1	THR	185	20.299	50.507	58.751	1.00	0.00	B
ATOM	7536	CG2	THR	185	18.263	49.881	59.667	1.00	21.65	B
ATOM	7537	C	THR	185	20.854	47.462	61.363	1.00	5.31	B
ATOM	7538	O	THR	185	22.042	47.661	61.386	1.00	21.65	B
ATOM	7539	N	TYR	186	20.339	46.265	61.502	1.00	16.16	B
ATOM	7540	H	TYR	186	19.361	46.149	61.469	1.00	0.00	B
ATOM	7541	CA	TYR	186	21.179	45.125	61.694	1.00	16.16	B
ATOM	7542	CB	TYR	186	20.797	44.493	63.021	1.00	2.00	B
ATOM	7543	CG	TYR	186	20.749	45.496	64.158	1.00	2.00	B
ATOM	7544	CD1	TYR	186	21.873	45.774	64.885	1.00	2.00	B
ATOM	7545	CE1	TYR	186	21.829	46.614	65.950	1.00	2.00	B
ATOM	7546	CD2	TYR	186	19.551	46.123	64.530	1.00	2.00	B
ATOM	7547	CE2	TYR	186	19.487	46.982	65.608	1.00	2.00	B
ATOM	7548	CZ	TYR	186	20.640	47.224	66.341	1.00	2.00	B
ATOM	7549	OH	TYR	186	20.613	47.957	67.540	1.00	2.00	B
ATOM	7550	HH	TYR	186	19.694	48.045	67.817	1.00	0.00	B
ATOM	7551	C	TYR	186	21.103	44.130	60.527	1.00	16.16	B
ATOM	7552	O	TYR	186	20.048	43.631	60.124	1.00	2.00	B
ATOM	7553	N	ILE	187	22.271	43.891	59.978	1.00	4.04	B
ATOM	7554	H	ILE	187	23.058	44.348	60.350	1.00	0.00	B
ATOM	7555	CA	ILE	187	22.465	43.015	58.874	1.00	4.04	B
ATOM	7556	CB	ILE	187	23.122	43.770	57.706	1.00	14.06	B
ATOM	7557	CG2	ILE	187	23.385	42.793	56.551	1.00	14.06	B

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ATOM	7558	CG1 ILE	187	22.322	45.039	57.379	1.00	14.06	B
ATOM	7559	CD1 ILE	187	21.948	45.217	55.888	1.00	14.06	B
ATOM	7560	C ILE	187	23.492	42.005	59.342	1.00	4.04	B
ATOM	7561	O ILE	187	24.519	42.393	59.865	1.00	14.06	B
ATOM	7562	N CYS	188	23.217	40.720	59.164	1.00	16.35	B
ATOM	7563	H CYS	188	22.351	40.436	58.814	1.00	0.00	B
ATOM	7564	CA CYS	188	24.207	39.726	59.507	1.00	16.35	B
ATOM	7565	C CYS	188	24.937	39.382	58.210	1.00	16.35	B
ATOM	7566	O CYS	188	24.334	39.347	57.134	1.00	4.13	B
ATOM	7567	CB CYS	188	23.574	38.475	60.100	1.00	4.13	B
ATOM	7568	SG CYS	188	22.433	37.677	58.997	1.00	4.13	B
ATOM	7569	N ASN	189	26.249	39.166	58.339	1.00	2.00	B
ATOM	7570	H ASN	189	26.640	39.214	59.201	1.00	0.00	B
ATOM	7571	CA ASN	189	27.126	38.822	57.239	1.00	2.00	B
ATOM	7572	CB ASN	189	28.276	39.762	57.290	1.00	9.78	B
ATOM	7573	CG ASN	189	27.811	41.165	57.237	1.00	9.78	B
ATOM	7574	OD1 ASN	189	28.211	42.006	58.048	1.00	9.78	B
ATOM	7575	ND2 ASN	189	26.926	41.437	56.278	1.00	9.78	B
ATOM	7576	HD21 ASN	189	25.979	41.275	56.445	1.00	0.00	B
ATOM	7577	HD22 ASN	189	27.256	41.792	55.422	1.00	0.00	B
ATOM	7578	C ASN	189	27.578	37.370	57.371	1.00	2.00	B
ATOM	7579	O ASN	189	28.590	37.028	58.025	1.00	9.78	B
ATOM	7580	N VAL	190	26.774	36.530	56.740	1.00	2.00	B
ATOM	7581	H VAL	190	26.000	36.911	56.267	1.00	0.00	B
ATOM	7582	CA VAL	190	26.971	35.118	56.720	1.00	2.00	B
ATOM	7583	CB VAL	190	25.659	34.444	56.332	1.00	20.25	B
ATOM	7584	CG1 VAL	190	25.797	32.959	56.332	1.00	20.25	B
ATOM	7585	CG2 VAL	190	24.571	34.910	57.274	1.00	20.25	B
ATOM	7586	C VAL	190	27.974	34.835	55.678	1.00	2.00	B
ATOM	7587	O VAL	190	27.813	35.251	54.561	1.00	20.25	B
ATOM	7588	N ASN	191	29.034	34.137	56.008	1.00	12.89	B
ATOM	7589	H ASN	191	29.183	33.830	56.919	1.00	0.00	B
ATOM	7590	CA ASN	191	30.002	33.823	54.984	1.00	12.89	B
ATOM	7591	CB ASN	191	31.246	34.668	55.174	1.00	26.66	B
ATOM	7592	CG ASN	191	32.204	34.557	54.006	1.00	26.66	B
ATOM	7593	OD1 ASN	191	32.916	35.501	53.680	1.00	26.66	B
ATOM	7594	ND2 ASN	191	32.231	33.392	53.363	1.00	26.66	B
ATOM	7595	HD21 ASN	191	31.707	33.293	52.547	1.00	0.00	B
ATOM	7596	HD22 ASN	191	32.787	32.663	53.741	1.00	0.00	B
ATOM	7597	C ASN	191	30.328	32.332	55.019	1.00	12.89	B
ATOM	7598	O ASN	191	30.584	31.773	56.071	1.00	26.66	B
ATOM	7599	N HIS	192	30.287	31.682	53.854	1.00	11.95	B
ATOM	7600	H HIS	192	30.038	32.163	53.050	1.00	0.00	B
ATOM	7601	CA HIS	192	30.614	30.253	53.753	1.00	11.95	B
ATOM	7602	CB HIS	192	29.340	29.446	53.570	1.00	12.75	B
ATOM	7603	CG HIS	192	29.570	27.978	53.517	1.00	12.75	B
ATOM	7604	CD2 HIS	192	29.150	27.034	52.633	1.00	12.75	B
ATOM	7605	ND1 HIS	192	30.435	27.342	54.380	1.00	12.75	B
ATOM	7606	HD1 HIS	192	30.911	27.754	55.135	1.00	0.00	B
ATOM	7607	CE1 HIS	192	30.541	26.071	54.027	1.00	12.75	B
ATOM	7608	NE2 HIS	192	29.772	25.861	52.969	1.00	12.75	B
ATOM	7609	HE2 HIS	192	29.665	25.011	52.504	1.00	0.00	B
ATOM	7610	C HIS	192	31.551	30.043	52.571	1.00	11.95	B
ATOM	7611	O HIS	192	31.089	29.689	51.502	1.00	12.75	B
ATOM	7612	N LYS	193	32.855	30.253	52.753	1.00	8.67	B
ATOM	7613	H LYS	193	33.181	30.477	53.647	1.00	0.00	B

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ATOM	7614	CA	LYS	193	33.815	30.129	51.635	1.00	8.67	B
ATOM	7615	CB	LYS	193	35.254	30.217	52.137	1.00	25.19	B
ATOM	7616	CG	LYS	193	35.967	31.546	51.858	1.00	25.19	B
ATOM	7617	CD	LYS	193	35.161	32.785	52.350	1.00	25.19	B
ATOM	7618	CE	LYS	193	36.032	33.943	52.926	1.00	25.19	B
ATOM	7619	NZ	LYS	193	37.423	33.533	53.336	1.00	25.19	B
ATOM	7620	HZ1	LYS	193	37.988	33.296	52.499	1.00	0.00	B
ATOM	7621	HZ2	LYS	193	37.363	32.692	53.952	1.00	0.00	B
ATOM	7622	HZ3	LYS	193	37.869	34.310	53.856	1.00	0.00	B
ATOM	7623	C	LYS	193	33.704	28.873	50.724	1.00	8.67	B
ATOM	7624	O	LYS	193	33.697	28.993	49.492	1.00	25.19	B
ATOM	7625	N	PRO	194	33.582	27.665	51.316	1.00	15.73	B
ATOM	7626	CD	PRO	194	33.506	27.405	52.762	1.00	22.43	B
ATOM	7627	CA	PRO	194	33.492	26.422	50.541	1.00	15.73	B
ATOM	7628	CB	PRO	194	33.318	25.340	51.605	1.00	22.43	B
ATOM	7629	CG	PRO	194	33.921	25.976	52.846	1.00	22.43	B
ATOM	7630	C	PRO	194	32.442	26.317	49.461	1.00	15.73	B
ATOM	7631	O	PRO	194	32.508	25.419	48.628	1.00	22.43	B
ATOM	7632	N	SER	195	31.467	27.212	49.470	1.00	2.00	B
ATOM	7633	H	SER	195	31.453	27.918	50.155	1.00	0.00	B
ATOM	7634	CA	SER	195	30.403	27.169	48.479	1.00	2.00	B
ATOM	7635	CB	SER	195	29.081	26.670	49.129	1.00	2.00	B
ATOM	7636	OG	SER	195	28.457	27.576	50.064	1.00	2.00	B
ATOM	7637	HG	SER	195	28.449	28.456	49.689	1.00	0.00	B
ATOM	7638	C	SER	195	30.272	28.592	47.991	1.00	2.00	B
ATOM	7639	O	SER	195	29.260	28.985	47.438	1.00	2.00	B
ATOM	7640	N	ASN	196	31.336	29.352	48.216	1.00	24.65	B
ATOM	7641	H	ASN	196	32.113	28.942	48.642	1.00	0.00	B
ATOM	7642	CA	ASN	196	31.392	30.759	47.854	1.00	24.65	B
ATOM	7643	CB	ASN	196	31.557	30.985	46.330	1.00	14.27	B
ATOM	7644	CG	ASN	196	32.394	29.915	45.645	1.00	14.27	B
ATOM	7645	OD1	ASN	196	33.613	29.776	45.894	1.00	14.27	B
ATOM	7646	ND2	ASN	196	31.749	29.163	44.755	1.00	14.27	B
ATOM	7647	HD21	ASN	196	32.069	29.179	43.819	1.00	0.00	B
ATOM	7648	HD22	ASN	196	30.986	28.627	45.050	1.00	0.00	B
ATOM	7649	C	ASN	196	30.101	31.425	48.326	1.00	24.65	B
ATOM	7650	O	ASN	196	29.514	32.230	47.593	1.00	14.27	B
ATOM	7651	N	THR	197	29.644	31.097	49.536	1.00	26.74	B
ATOM	7652	H	THR	197	30.118	30.449	50.086	1.00	0.00	B
ATOM	7653	CA	THR	197	28.422	31.726	50.015	1.00	26.74	B
ATOM	7654	CB	THR	197	27.538	30.752	50.857	1.00	17.67	B
ATOM	7655	OG1	THR	197	26.626	30.053	49.992	1.00	17.67	B
ATOM	7656	HG1	THR	197	26.630	29.118	50.206	1.00	0.00	B
ATOM	7657	CG2	THR	197	26.690	31.532	51.897	1.00	17.67	B
ATOM	7658	C	THR	197	28.646	33.035	50.793	1.00	26.74	B
ATOM	7659	O	THR	197	29.342	33.094	51.808	1.00	17.67	B
ATOM	7660	N	LYS	198	28.056	34.090	50.256	1.00	6.96	B
ATOM	7661	H	LYS	198	27.562	33.972	49.414	1.00	0.00	B
ATOM	7662	CA	LYS	198	28.117	35.399	50.849	1.00	6.96	B
ATOM	7663	CB	LYS	198	28.921	36.353	49.993	1.00	29.83	B
ATOM	7664	CG	LYS	198	30.274	36.673	50.551	1.00	29.83	B
ATOM	7665	CD	LYS	198	30.556	38.157	50.439	1.00	29.83	B
ATOM	7666	CE	LYS	198	29.972	38.734	49.139	1.00	29.83	B
ATOM	7667	NZ	LYS	198	30.596	38.175	47.850	1.00	29.83	B
ATOM	7668	HZ1	LYS	198	29.820	37.867	47.219	1.00	0.00	B
ATOM	7669	HZ2	LYS	198	31.204	37.362	48.067	1.00	0.00	B

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ATOM	7670	HZ3	LYS	198	31.145	38.916	47.371	1.00	0.00	B
ATOM	7671	C	LYS	198	26.663	35.824	50.837	1.00	6.96	B
ATOM	7672	O	LYS	198	25.982	35.719	49.829	1.00	29.83	B
ATOM	7673	N	VAL	199	26.156	36.232	51.978	1.00	2.00	B
ATOM	7674	H	VAL	199	26.699	36.241	52.800	1.00	0.00	B
ATOM	7675	CA	VAL	199	24.803	36.647	52.002	1.00	2.00	B
ATOM	7676	CB	VAL	199	23.901	35.415	52.204	1.00	10.12	B
ATOM	7677	CG1	VAL	199	22.663	35.730	53.014	1.00	10.12	B
ATOM	7678	CG2	VAL	199	23.497	34.917	50.829	1.00	10.12	B
ATOM	7679	C	VAL	199	24.604	37.696	53.061	1.00	2.00	B
ATOM	7680	O	VAL	199	25.341	37.756	54.048	1.00	10.12	B
ATOM	7681	N	ASP	200	23.653	38.576	52.810	1.00	20.39	B
ATOM	7682	H	ASP	200	23.182	38.545	51.964	1.00	0.00	B
ATOM	7683	CA	ASP	200	23.315	39.587	53.793	1.00	20.39	B
ATOM	7684	CB	ASP	200	23.724	40.961	53.326	1.00	33.41	B
ATOM	7685	CG	ASP	200	25.194	41.058	53.211	1.00	33.41	B
ATOM	7686	OD1	ASP	200	25.860	40.264	53.892	1.00	33.41	B
ATOM	7687	OD2	ASP	200	25.709	41.883	52.444	1.00	33.41	B
ATOM	7688	C	ASP	200	21.830	39.513	54.060	1.00	20.39	B
ATOM	7689	O	ASP	200	20.990	39.440	53.140	1.00	33.41	B
ATOM	7690	N	LYS	201	21.516	39.415	55.335	1.00	5.32	B
ATOM	7691	H	LYS	201	22.218	39.354	56.017	1.00	0.00	B
ATOM	7692	CA	LYS	201	20.138	39.385	55.708	1.00	5.32	B
ATOM	7693	CB	LYS	201	19.757	38.060	56.363	1.00	24.51	B
ATOM	7694	CG	LYS	201	18.261	37.816	56.341	1.00	24.51	B
ATOM	7695	CD	LYS	201	17.703	37.724	54.908	1.00	24.51	B
ATOM	7696	CE	LYS	201	16.808	38.927	54.583	1.00	24.51	B
ATOM	7697	NZ	LYS	201	16.712	39.312	53.102	1.00	24.51	B
ATOM	7698	HZ1	LYS	201	15.771	39.755	52.957	1.00	0.00	B
ATOM	7699	HZ2	LYS	201	16.793	38.471	52.504	1.00	0.00	B
ATOM	7700	HZ3	LYS	201	17.443	40.009	52.878	1.00	0.00	B
ATOM	7701	C	LYS	201	19.979	40.536	56.658	1.00	5.32	B
ATOM	7702	O	LYS	201	20.772	40.737	57.575	1.00	24.51	B
ATOM	7703	N	LYS	202	18.981	41.341	56.360	1.00	16.49	B
ATOM	7704	H	LYS	202	18.450	41.150	55.563	1.00	0.00	B
ATOM	7705	CA	LYS	202	18.681	42.480	57.190	1.00	16.49	B
ATOM	7706	CB	LYS	202	18.234	43.678	56.332	1.00	41.56	B
ATOM	7707	CG	LYS	202	16.904	44.300	56.716	1.00	41.56	B
ATOM	7708	CD	LYS	202	17.064	45.648	57.386	1.00	41.56	B
ATOM	7709	CE	LYS	202	16.012	46.641	56.873	1.00	41.56	B
ATOM	7710	NZ	LYS	202	16.538	48.028	56.543	1.00	41.56	B
ATOM	7711	HZ1	LYS	202	17.547	47.989	56.293	1.00	0.00	B
ATOM	7712	HZ2	LYS	202	16.436	48.610	57.409	1.00	0.00	B
ATOM	7713	HZ3	LYS	202	15.985	48.486	55.792	1.00	0.00	B
ATOM	7714	C	LYS	202	17.557	41.909	57.983	1.00	16.49	B
ATOM	7715	O	LYS	202	16.670	41.274	57.418	1.00	41.56	B
ATOM	7716	N	VAL	203	17.601	42.085	59.294	1.00	3.06	B
ATOM	7717	H	VAL	203	18.354	42.565	59.682	1.00	0.00	B
ATOM	7718	CA	VAL	203	16.546	41.560	60.141	1.00	3.06	B
ATOM	7719	CB	VAL	203	17.176	40.502	61.134	1.00	27.30	B
ATOM	7720	CG1	VAL	203	18.640	40.441	60.934	1.00	27.30	B
ATOM	7721	CG2	VAL	203	16.838	40.792	62.589	1.00	27.30	B
ATOM	7722	C	VAL	203	15.840	42.710	60.859	1.00	3.06	B
ATOM	7723	O	VAL	203	16.509	43.514	61.501	1.00	27.30	B
ATOM	7724	N	GLU	204	14.522	42.833	60.735	1.00	27.40	B
ATOM	7725	H	GLU	204	14.026	42.210	60.168	1.00	0.00	B

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ATOM	7726	CA	GLU	204	13.818	43.925	61.449	1.00	27.40	B
ATOM	7727	CB	GLU	204	13.674	45.162	60.558	1.00	30.20	B
ATOM	7728	CG	GLU	204	12.637	45.043	59.446	1.00	30.20	B
ATOM	7729	CD	GLU	204	13.287	44.633	58.145	1.00	30.20	B
ATOM	7730	OE1	GLU	204	14.424	44.093	58.229	1.00	30.20	B
ATOM	7731	OE2	GLU	204	12.677	44.840	57.066	1.00	30.20	B
ATOM	7732	C	GLU	204	12.447	43.563	62.032	1.00	27.40	B
ATOM	7733	O	GLU	204	11.980	42.491	61.584	1.00	30.20	B
ATOM	7734	OT	GLU	204	11.876	44.320	62.888	1.00	30.20	B
END										



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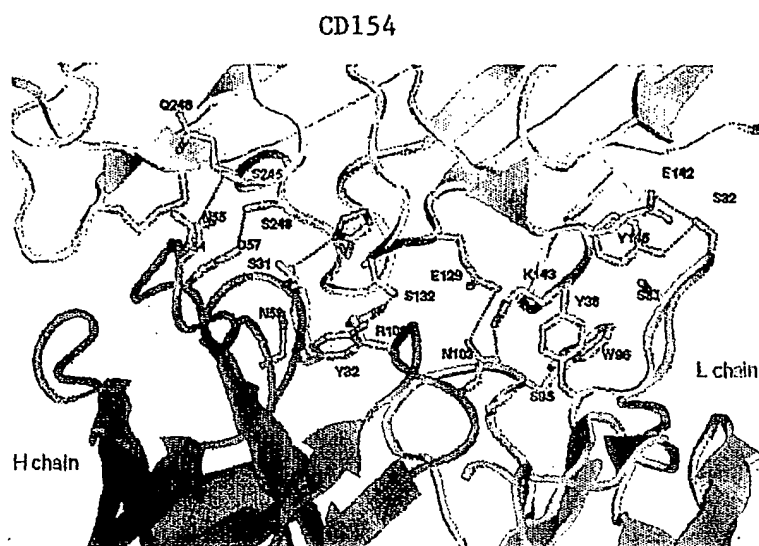
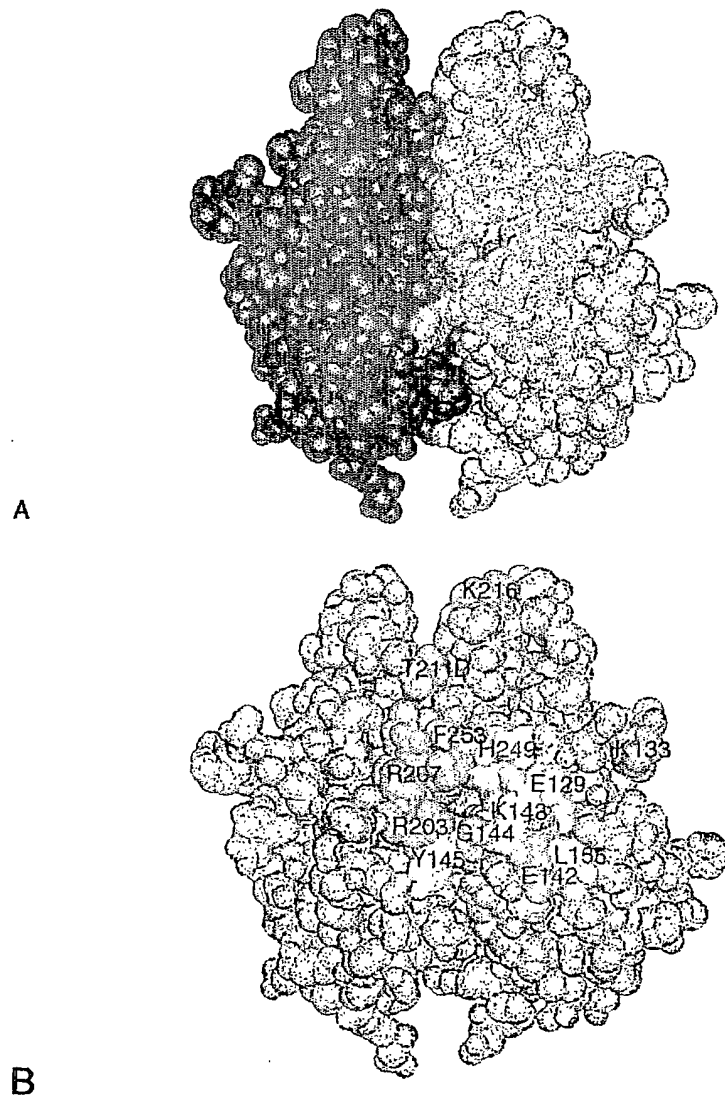


Figure 10

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Figure 11



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